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U.S. Department of Agriculture
Forest Service

Forest Service

Directory of
Automated Systems

FOREST SERVICE
DIRECTORY OF AUTOMATED SYSTEMS

INTRODUCTION

The information contained in this directory was extracted from the Forest Service Automated Systems Inventory containing systems reported by Forest Service units. The inventory includes a wide range of general purpose and utility routines; specialty applications utilized by functional staffs such as range, recreation, and timber; and programs acquired from colleges, universities, other agencies and the USE Program Library Interchange (UPLI).

Applications selected for inclusion in this directory are those reported by Forest Service units as (1) being operational, in use, or post-operational; (2) having software available for exchange; and (3) having documentation available. Any systems with incomplete information were omitted from this directory. No proprietary software or software maintained by U.S. Department of Agriculture computer centers is included. No data files or data bases are listed.

This directory should be reviewed by anyone seeking a particular application to meet his needs. It can also be used by developers planning new applications to ensure that the same or similar applications are not already in existence within the Forest Service. However, the complete Automated Systems Inventory should be reviewed to see if a newly planned application may already be under development. User instructions for accessing the Automated Systems Inventory are contained in the Forest Service Manual.

This directory is current as of December 1, 1978.

Compiled by Computer Systems Applications Staff

USER'S GUIDE

This directory is arranged in two parts: the first is an index and the second is the software listed by the system or program I.D. number under which it is maintained in the Forest Service Automated Systems Inventory. The system or program I.D. number is an eight-digit number whose left-most four digits indicate the Forest Service functional area; e.g., Timber is 2400, Watershed is 2500, etc.

The index is arranged by ascending order of functional areas, showing the first four digits of the function and then a descriptive name of the function. Following each functional area heading is the listing of applications within the functional area showing, by order of system or program I.D. number, the software title and the page number for the detailed information.

In the second part, the software listing by system or program I.D. number provides the following information for each application:
1) System or Program I.D. Number;
2) Software Title (includes version number and date);
3) Short Title;
4) Narrative Description;
5) Mode Software Developed For;
6) Computer Manufacturer and Model;
7) Technical Information Contact(s) (name(s), address, and telephone number(s)).

The following abbreviations are used for computer manufacturers:
AMD = Amdahl
CDC = Control Data Corporation
GEL = General Electric Corporation
HPC = Hewlett Packard Corporation
IBM = International Business Machines
UNI = Sperry Rand Corporation
XER = Xerox Corporation

If you wish to use or acquire any of the software listed in the directory, write or call the technical information contact shown in the software listing.

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System or Program I.D. Number	Software Title	Page

System or Program I.D. Number
13001002

Software Title: **ANALYSIS OF MARKET RESEARCH, 01, 750104**

Short Title: RUTH2

Narrative Description: Program used to prepare an interindustry flow table for a region which will show transactions that are "net" in terms of regionally produced products, i.e., the flows are net of imports. Output of first program is input to the occupant program which performs simple matrix operations in connection with the occupational employment and demographic portion of the forma analytical system. The program is specifically designed to perform the work in the form of four separate problems, each providing some specific operation required for either obtaining population or occupational employment information. User type instructions available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Stan Randall
USDA Forest Service
517 Gold Ave., S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8-474-3292

System or Program I.D. Number
13001005

Software Title: **INVEST III, 01, 690909**

Short Title: INVEST

Narrative Description: INVEST III is an analysis program of natural resource investments using discounting formulas that will compute net percent worth, benefit cost ratio, annual equivalent value of net percent worth, and the internal rate of return for each project based on the time schedule of the benefits and costs that occur. User guide.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Turner
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 0890

System or Program I.D. Number
13001006

Software Title: **GRAVITY MODELING, 01, 700115**

Short Title: GRVMOD

Narrative Description: The gravity model is used to aid land-use planners in analyzing social and economic data on a geographic basis. For example, the program POPMOD sums variables located by latitude and longitude within 3 radii of selected points also represented by latitude and longitude. Users guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ray Hall
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, GA 30309
Telephone Number: FTS 8 257 4676 Comm (404) 881 4676

System or Program I.D. Number
13001008

Software Title: **MAP GENERATION, 780329**

Short Title: FS*R1.CKDATA, FS*R1.COMBO3

Narrative Description: FS*R1.CKDATA is a program used to detect errors in maps to be combined using FS*R1.COMBO3 FS*R1.COMBO3 is a mapping program that generates a map representation of the combination of two maps.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Doris L. Matz
USDA Forest Service
Sandpoint, Idaho
Telephone Number: Comm 208 264 5111 Thru FTS 554 1111

System or Program I.D. Number
13001010

Software Title: **BUDGET PROGRAM, 760908**

Short Title: CSSG˙R1LIB.BUDGPROG

Narrative Description: Aids in figuring supervisor's office and ranger district general administration funding. Creates a report to replace form 6500-151.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mary Lyon
USDA Forest Service
PO Box 2516
Billings, Montana 59103
Telephone Number: FTS 8 585 6361

System or Program I.D. Number
13001013

Software Title: **R9 CRITICAL PATH METHOD, 771115**

Short Title: R9CPM

Narrative Description: This is an activity-on-arrow cpm program. The program will handle 250 activities. The network is sorted and printed in the order specified by the user. There are 5 types of printouts available-cross reference list, cpm by time units, cpm by dates, job calendar, and bar charts.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Warren Hilgemann
USDA Forest Service
633 West Wisconsin Ave.
Milwaukee, Wisconsin 53203
Telephone Number: FTS 8 362 3687

1600 INFORMATION SERVICES

System or Program I.D. Number
16001001

Software Title: **FAMULUS, 01, 700615**

Short Title:

Narrative Description: FAMULUS is designed to process personal reference collections maintained by researchers. However, its basic structure renders it suitable for a large number of other applications. FAMULUS will maintain many types of information files which can be broken into units or records with sub-categories or fields which can be identified. In a personnel information file, the data on each person comprises one record. The record may have up to 10 distinct fields in which are entered name, date of birth, job title, etc. In bibliographic files, the citation is the record, and fields are used for author, title, date, keywords, abstracts, etc. The eight main FAMULUS programs are as follows: 1. EDIT-writes punched card input onto tape, allows the user to make corrections, additions, and deletions; 2. SORT-rearranges file order by changing the order of files within records so the file can be realphabetized; 3. MERGE-provides updating facilities and permits enlargement of the files through merging two individual files into one master file; 4. galleyprints the file in any of several formats; 5. VOCAB-prints in alphabetic order the words in any given field of a file, making lists of index terms, keywords in title, etc.; 6. INDEX-lists keywords and tells in what records they may be found, thereby indexing your file; 7. SEARCH-scans stipulated field(s) in the records of a file, matching them against a

—Continued

user-prepared search question. Only those records that meet the search requirements are printed out; 8. OSSIFY-punches card deck equivalents of tape files, for use as safety decks or for massive correction operations.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6000-7000, UNI 1108, IBM 360-370

Technical Information Contact:
James W Clarke
USDA Forest Service
1960 Addison Street
Berkeley, CA 94701
Telephone Number: FTS 8 449 3686

System or Program I.D. Number
16001002

Software Title: **PERIODICAL ROUTING SYSTEM, 01, 730601**

Short Title: PERO

Narrative Description: PERO is a computer supported system to facilitate circulation of periodicals by a centralized library. Routing slips are printed each month and various reports to users, operators and managers of the system are produced.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
T. Dell
Southern Forest Experiment Station
701 Loyola Avenue
New Orleans, LA 70113
Telephone Number: FTS 8 682 6781

System or Program I.D. Number
16001006

Software Title: **MAILING LABEL SYSTEM, 760908**

Short Title: LABELS

Narrative Description: A comprehensive system of address records with a corresponding list of categories. Each address record may be in one or more categories and lists or LABELS may be extracted by any "AND" or "OR" combination of categories. Updating and changing of records thoroughly edited and controlled by both serial number and alphabetic sort key.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jack Arthur
USDA Forest Service
P.O. Box 1628
Juneau, AK 99802
Telephone Number: Comm 907 586 7261 Thru FTS 399 0150

1800 HUMAN RESOURCE PROGRAMS

System or Program I.D. Number
18001002

Software Title: **HUMAN RESOURCES**

Short Title: HUM RBS

Narrative Description: Programs sort and produce annual statistical reports for HUMAN RESOURCES.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher Martin
USDA Forest Service
P.O. Box 2417
Washington D.C. 20021
Telephone Number: FTS 447 2051

2200 RANGE MANAGEMENT

System or Program I.D. Number
22001001

Software Title: **ALLOTMENT ANALYSIS, 01, 750120**

Short Title:

Narrative Description: System provides for storing information about each grazing allotment pertaining to range condition, veg., stocking and management. This information is analyzed and aggregated annually with the following reports being generated - ALLOTMENT ANALYSIS master, range management situation by vegetation type and by grazing system, and ALLOTMENT ANALYSIS accomplishment by administrative level. Program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Phil Smith
USDA Forest Service, Region 3
517 Gold SW
Albuquerque, NM 87102
Telephone Number: Comm 505-766-2428   FTS 8-474-2428

System or Program I.D. Number
22001002

Software Title: **RANGE PRODUCTION UTILIZATION, 01, 741126**

Short Title: RGEUSE

Narrative Description: This conversational production utilization program calculates and displays conventional production utilization data tables and grazing capacity estimates for range land. Summaries are prepared on both an individual pasture and total allotment basis for both suitable and unsuitable range. A users guide plus several pages of the doc processor are available to users.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

System or Program I.D. Number
22001005

Software Title: **RANGE IMPROVEMENT INVENTORY, 01, 750811**

Short Title:

Narrative Description: Prints the RANGE IMPROVEMENT INVENTORY report, a detail listing of the master file with totals of construction costs on allotment number and status code (existing or proposed) breaks.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
22001007

Software Title: **PRODUCTIVITY INDEX, 01, 750811**

Short Title: PRDI

Narrative Description: Prepares the following reports by forest and district (1) range analysis completion status worksheet, (2) range analysis accomplishment, and (3) completion status.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
L. Fluckiger
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6441

System or Program I.D. Number
22001008

Software Title: **SITE ANALYSIS, 01, 750811**

Short Title: SITA

Narrative Description: Using sample plot or site data, calculates dry weight and the percent dry weight by species.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
L. Fluckiger
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6441

System or Program I.D. Number
22001011

Software Title: **RANGE IMPROVEMENTS INVENTORY,
12/06/77**

Short Title:

Narrative Description: This system creates a data file for range structural and nonstructural improvements. Updates, edits, and inventory listings are run from this file.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Rudy Wright-Computer Systems
USDA Forest Service
517 Gold Ave. S.W.
Albuquerque, NM 87102
Telephone Number: Comm 505 766 2591   FTS 474 2591

2300 RECREATION MANAGEMENT

System or Program I.D. Number
23001001

Software Title: **RECREATION RIM BASIC
ADDRESS SUBSYSTEM,
01, 750106**

Short Title: RIM BASIC ADDRESS

Narrative Description: This subsystem accomplishes the annual maintenance of the RIM BASIC ADDRESS file as described in FSH 2309.11. All updating and report generation is performed by this system. Reports are printed and microfilmed.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
23001002

Software Title: **RECREATION RIM ORIGIN OF
VISITORS BY ZIPCODE ANALYSIS,
01, 75010**

Short Title: RECZIP

Narrative Description: This system processes data collected from forest service recreation sites and produces reports which analyze users of recreation sites by utilizing zipcode of visitors. Analysis of users by state of origin, distance from site, percentage of visitors by miles travelled and state of origin, etc.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
2300 1003

Software Title: **RECREATION RIM DOUBLE SAMPLE SUBSYSTEM, 01, 750106**

Short Title: RIM DOUBLE SAMPLE

Narrative Description: This subsystem accomplishes the annual creation of the double sample file as described in FSH 2309.11. All updating and report generation is performed by this system.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
2300 1004

Software Title: **RECREATION RIM USE SUBSYSTEM, 01, 750106**

Short Title: RIM REC USE

Narrative Description: This system accomplishes the annual creation of the RIM use file as described in FSH 2309.11. All updating and report generation performed by this system. Some reports are printed and some are microfilmed. An operators manual is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
2300 1005

Software Title: **RECREATION RIM FACILITY SUBSYSTEM, 01, 750106**

Short Title: RIM FACILITY

Narrative Description: This subsystem accomplishes the annual maintenance of the RIM directory file as described in FSH 2309.11. All updating and report generation is performed by this subsystem. Reports are printed and microfilmed.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
2300 1006

Software Title: **RECREATION GIM FILES, 01, 750106**

Short Title: RIMGIM

Narrative Description: This system performs all processing required to create GIM files for the recreation data base. GIM (generalized information management) is a proprietary software package utilized for interactive or batch mode information storage and retrieval.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
23001007

Software Title: **RECREATION RIM DIRECTORY SUBSYSTEM,** 01, 750106

Short Title: RIM DIRECTORY

Narrative Description: This subsystem accomplishes the annual maintenance of the RIM DIRECTORY file as described in FSH 2309.11. All updating and report generation are performed by this subsystem. Reports are printed and microfilmed.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gene Welch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4313

System or Program I.D. Number
23001008

Software Title: **RECREATION AND LANDS OCCUPANCY,** 01, 701101

Short Title: OCCUPANCY

Narrative Description: uses sampling system for developed recreational sites. The system is based on a random sample of 6 weekend days and 6 week days. A listing is printed giving total numbers, percentages and averages by district and forest. Also, recreational management/information composites of visitor days use per unit per day is an optional report which may be obtained. The following use breakdowns may be determined: season long and projected season long use; nighttime and daytime OCCUPANCY rates; equipment types such as tent, trailer and mobile unit camping. User guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Nancy M. Traugott
USDA Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 234 4082

System or Program I.D. Number
23001010

Software Title: **ITEM SERIATION FOR ARCHELOGICAL INVEST,** 01, 750811

Short Title: SRAT

Narrative Description: Performs item seriation, i.e., places items in a series so that the position of each best reflects the degree of similarity between that item and all other items in the data set.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Evan Deblois
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6666

System or Program I.D. Number
23001012

Software Title: **ROBINSON INDEX OF SIMILARITY,** 01, 730101

Short Title: INDEX

Narrative Description: Calculates ROBINSON INDEX OF SIMILARITY between sites of archeological investigations. Output from this program can be used as input into program SRAT (item seriation, prog. no. 23001010).

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Evan Deblois
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6666

System or Program I.D. Number
23001016

Software Title: **RECREATION OPPORTUNITY INVENTORY, 760908**

Short Title: REC-ED OR REC-QNT

Narrative Description: REC-QNT prints two reports on data selected from RECREATION OPPORTUNITY INVENTORY data file.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Howard
USDA Forest Service
Federal Building
Missoula, MT 59801
Telephone Number: FTS 585-3778

System or Program I.D. Number
23001019

Software Title: **CULTURAL RESOURCES AUTOMATED INFORMATION SYSTEM II**

Short Title: CRAIS

Narrative Description: The system allows the preparation of reports and the statistical analysis of inventory and site data by interfacing the SDF files with existing software (SPSS and QWICK-QWERYL). Five basic language programs may be used for statistical sampling work.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Landon D. Smith
USDA Forest Service
P.O. Box 1689
Santa Fe, NM 87501
Telephone Numbers: FTS 476-1588,
Comm 505 988-6588

2400 TIMBER MANAGEMENT

System or Program I.D. Number
24001001

Software Title: **IYIELD TIMBER MANAGEMENT, 01, 741205**

Short Title: YIELD

Narrative Description: Computes and prints YIELD tables for diseased even-aged managed stands of lodgepole and ponderosa pine. Initial management age of stand and the stand age at time of initial infection by dwarf mistletoe are input variables which will affect the YIELD tables. Program documentation available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Tyree
USDA Forest Service
11177 West 8th Avenue
Lakewood, CO 80225
Telephone Number: Comm/FTS 303 234 3914

System or Program I.D. Number
24001005

Software Title: **SKYLINE LOAD ANALYSIS PROGRAMS, 02, 780407**

Short Title: CABL10 OR SKY16

Narrative Description: Skyline load analysis consists of two independent programs (which basically perform similiar functions). The user may select either CABL 10 or SKY 16 for the analysis. the description of each program follows: Program CABL10 computes the parameters for 3 standard rigging arrangements, that are developed from supporting the estimated log load that are either fully or partially suspended. This program operates in either batch or demand mode. The interactive version prompts the user for input. Documentation for CABL 10 may be obtained from C. Swarthout, Eng. Staff, R-5, USDA Forest Service, San Francisco, CA. Program SKY 16 computes the fully suspended allowable payload for 3 standard rigging arrangements.This program operates in batch mode only. Documentation for SKY 16 may be obtained from the logging systems group, Timber Mgmt. Staff, USDA Forest Service, Portland, OR (FTS 8 423 3915.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42,
CDC 3100

Technical Information Contact:
C. D. Swarthout
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 8 556 3056

System or Program I.D. Number
24001008

Software Title: **TIMBER CUT AND SOLD PROCESSOR, 771115**

Short Title: TIMCSP

Narrative Description: The TIMBER CUT AND SOLD PROCESSOR produces regional and service-wide reports using data prepared on Form 2400-49 by each forest. The system includes edit routines and report writers useful to both the Regional and Washington office timber management staffs.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Theodore A. Black
USDA Forest Service
3825 E. Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 323-1356   Comm (303) 493-5806

System or Program I.D. Number
24001009

Software Title: **TIMBER SALE ACCOUNTING SYSTEM, 01, 660701**

Short Title: TSAS

Narrative Description: This system performs all required timber sale accounting operations from the time a contract is made with a purchaser until all conditions of a contract are fulfilled. It encompasses contracts drawn on all forms. The system includes preparation of: statement of account, quarterly adjustments, purchaser bills for collection, timber sale synopsis, charge adjustment worksheet, timber receipts transfer worksheet, quarterly cut and sold report, accounting control reconciliation, control sheet for scale data, and the annual computation of unearned deposits. In addition, data accumulated by the system are made available for other timber management reporting purposes, such as semi-annual timber management control record and the timber management planning report. Ultimate control of the purchaser accounts is with the ranger district. The system eliminates the need for keeping manual records of the forest and district level. In order to minimize routine and redundant effort, the concept of management by exception has been incorporated.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Edwin Hughes
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 323 1401

System or Program I.D. Number
24001010

Software Title: **SAMPLE SCALING, 01, 741202**

Short Title: LOUIE

Narrative Description: This is a double SAMPLE SCALING program developed for Region 3 to aid in determining scaling and sampling frequency. A users guide plus several pages of the DOC processor are available for instruction.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

System or Program I.D. Number
24001011

Software Title: **TIMBER ADVERTISED SALES (2400-17), 01, 740701**

Short Title: TAS

Narrative Description: A system to edit data of timber advertised sales for feasible limits of individual items and conflict among items, produce an edited listing of timber advertised sales, keep files of timber advertised sales of and no longer of current interest and produce six statistical summary reports on the timber advertised sales. Users Guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Betty Corey
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 9190

System or Program I.D. Number
24001012

Software Title: CONTINUOUS INVENTORY OF
STAND CONDITION,
01, 750124

Short Title: CISC

Narrative Description: CISC is an automated data storage
and retrieval system designed exclusively for compartment
prescription data. Input is from compartment prescription,
stand mapping projects, and updating as the result of
changes due to re-examination, cutting, cultural treatment,
etc. The system is in two parts, the batch oriented data and
file handling programs and the batch/interactive report pro-
ducing programs.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., NW, Suite 215
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
24001013

Software Title: 3P SAMPLE TREE MEASUREMENT,
01, 730303

Short Title: STX

Narrative Description: STX allow combining 3P sampling
and dendrometry with multi-stage sampling where first stage
may involve area sampling or point sampling. Users guide
available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Chuck Chehock
USDA Forest Service
1720 Peachtree Rd NW, Suite 711
Atlanta, GA 30309
Telephone Number: FTS 285 3611

System or Program I.D. Number
24001014

Software Title: TIMBER SALES, 01, 730620

Short Title: TBRSLS

Narrative Description: System used for TIMBER SALES con-
taining commercial species. TBRSLS will handle either sample
tree measurement, non-sample tree measurement or a com-
bination of these on the same sale area. It provides the
volume, selling price, chip and basis information for each
commercial species in appraising the timber sale. Program,
system and user documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ted Lacher
USDA Forest Service
1720 Peachtree Rd, N.W., Suite 828
Atlanta, GA 30309
Telephone Number: FTS 285 3846

System or Program I.D. Number
24001016

Software Title: TIMBER RESOURCE
ALLOCATION SYSTEM

Short Title: TIMBER RAM

Narrative Description: RAM is a computerized method for de-
veloping long-range timber management plans. Each RAM plan
consists of a cutting and reforestation schedule and of reports
tabulating the corresponding stumpage volumes, revenues and
cost. Requires use of a large scale linear programming al-
gorithm (FMPS or ILONA). Interactive program available for
generating systems control statements. User package of 4 Col-
umes published by PSW Expt. Station.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Daniel Jones Or Edward Gryczan
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1401 Or Comm. (303) 493 2801

System or Program I.D. Number
24001020

Software Title: **COMPARTMENT INVENTORY ANALYSIS,
01, 771109**

Short Title: CIA

Narrative Description: Forest and compartment inventory system for timber management in California region. Includes determination of volume and growth coefficients, expansion factors, and error terms, production of yield tables, files for input to Timber Ram and a large optional set of printed reports at various levels of summarization. Inputs are ground field data and WRIS map information. WRIS is a mapping system. user guide available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jack Levitan, Tom Smithberger, Bohden Cmavlo
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Numbers: FTS 558-2993,
556-6274, 556-4287

System or Program I.D. Number
24001023

Software Title: **RANDOM NUMBER 3P SAMPLING,
01, 750214**

Short Title: RN3PR5

Narrative Description: Generates random numbers for use in 3P sampling. User guide and program documentation available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Smithberger
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 6274

System or Program I.D. Number
24001024

Software Title: **SAMPLE SCALING (TIMBER),
01, 750218**

Short Title: TIMSCALE

Narrative Description: This is a timber sample scaling program. It is used to determine sample frequency based on log volumes only. Use it only when desired accuracy in sampling can be met by sampling 35% or less of total sale volume. A users guide is available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service, Timber Staff
517 Gold S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

System or Program I.D. Number
24001025

Software Title: **TIMBER SALE
VOLUME/VALUE SYSTEM,
01, 740701**

Short Title: TSVVS

Narrative Description: The system computes statistical summaries for the sale, or by block, including C.V. and limit of error. Net volumes of pulp and veneer, plus gross and net volumes of sawtimber by DBH classes and species are also computed. For trees with quality information, average adjusted selling prices are computed. After initial edits, summaries are generated in both conventional units and cunits. Historical summariess are also produced and maintained. User guide and program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Warren Hilgemann
USDA, Forest Service
633 W. Wisconsin Avenue
Milwaukee, Wisconsin 53203
Telephone Number: FTS 362-3687

System or Program I.D. Number
24001028

Software Title: **TIMBER EVALUATION PLANNING (TVAP2), 01, 740110**

Short Title: TVAP

Narrative Description: Processes timber inventory records, computes area totals and subtotals. Computes optimum growing stock and yields, present and future volumes, periodic yields and prints timber management plans. Station research paper available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Carl Edminister
 Rocky Mountain Range & Experiment Station
 Fort Collins, CO 80521
 Telephone Number: FTS 323 5211

System or Program I.D. Number
24001029

Software Title: **REMEASURED SAMPLING PLOTS, 01, 741220**

Short Title: REMESR

Narrative Description: Designed to produce growth and mortality estimates from 1/5 acre REMEASURED SAMPLING PLOTS or other sized Fixed Plot designs. Outputs consist of tree growth analysis, stand table for each remeasured location, summary of all location information, volume table by location and a summary of all plot and tree variables calculated. Program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Edward D. Day
 USDA Forest Service
 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 5279

System or Program I.D. Number
24001030

Software Title: **STAND ANALYSIS (STAGE 1 & 2), 01, 750220**

Short Title: VARGEN

Narrative Description: Designed to process all Stage 1 and Stage 2 variable plot data for Region 2. Outputs consist of stand analysis, general plot information table, average growth per acre table, a stocking percent sample summary table and a summary table of sample growth and mortality information. File element containing input information available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Edward D. Day
 USDA Forest Service
 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 5279

System or Program I.D. Number
24001031

Software Title: **TIMBER FORM 2400-17 (5/73), 01, 750324**

Short Title: TIMBER

Narrative Description: This program is for calculating the unknown values, totals and averages on form 2400-17 (5/73). A users guide is available,.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Tom Porter
 USDA Forest Service
 517 Gold, S.W.
 Albuquerque, NM 87102
 Telephone Number: FTS 8 474 2591

System or Program I.D. Number
24001032

Software Title: **HARDWOOD PRICE
SUMMARY PHASE II,
01, 750327**

Short Title: HDWDPH

Narrative Description: This program utilizes sawmill summary data, submitted by Timber Management Staff, to compute green to dry yields, average overruns, average price per thousand board feet by DBH, grade, species and lumber grades of hardwood only.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 3846

System or Program I.D. Number
24001033

Software Title: **SOFTWOOD PRICE
SUMMARY PHASE II,
01, 750327**

Short Title: SOFTPH

Narrative Description: This system utilizes softwood sawmill summary data submitted by Timber Management Staff to compute green to dry yields, average overrun, average price per thousand board feet by DBH lumber grade.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 3846

System or Program I.D. Number
24001034

Software Title: **SPRUCE PRICE SUMMARY, 01, 750327**

Short Title: SPRUCE

Narrative Description: This system utilizes data gathered from lumber mill operators to compute the average selling price per thousand board feet by grade, width, thickness, length, operator number, admin. unit and selling zone of SPRUCE only.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 285 3846

System or Program I.D. Number
24001035

Software Title: **HEMLOCK PRICE SUMMARY PHASE I,
01, 750327**

Short Title: HMLOCK

Narrative Description: The system utilizes data gathered from lumber mill operators to compute the average selling prices by grade, width, thickness, length, operator number, admin. unit, sale zone, plus various summaries for the region.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 285 3846

System or Program I.D. Number
24001036

Software Title: **WHITE PINE PRICE SUMMARY PHASE I,
01, 750327**

Short Title: WHPINE

Narrative Description: The system utilizes data gathered from lumber mill operators, to compute the average selling prices by grade, width thickness, length, operator number, admin. unit, sale zone, plus various summaries for the region.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 285 3846

System or Program I.D. Number
24001037

Software Title: **HARDWOOD PRICE SUMMARY PHASE I,
01, 750327**

Short Title: HDWD

Narrative Description: The system utilizes data gathered from lumber mill operators, in each sale zone, to compute the average selling prices by species, grade, width, thickness, length, diameter, operator number, admin. unit, sale zone, plus various summaries for the region.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 285 3846

System or Program I.D. Number
24001038

Software Title: **YELLOW PINE PRICE
SUMMARY PHASE I,
01, 750327**

Short Title: SOFT

Narrative Description: The system utilizes data gathered from lumber mill operators, in each sale zone, to compute average selling prices by grade, width, thickness, length, operator number, admin. unit, sale zone, plus various summaries for the region.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 285 3846

System or Program I.D. Number
24001040

Software Title: **GENETICS TREE
IMPROVEMENT SYSTEM,
01, 730101**

Short Title: GENETA

Narrative Description: This system lists, updates and summarizes data collected in the region's genetic programs. The superior tree register and status report keep forests informed of their superior tree selection progress. Pollination and seed collection records give information on the type and amount of seed available for each seed lot. The seed orchard files contain pertinent data for each tree (position) in the seed orchard.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Barbara Nissen
USDA Forest Service
633 W Wisconsin Avenue
Milwaukee, Wisconsin 53203
Telephone Number: FTS 8 362 3687

System or Program I.D. Number
24001041

Software Title: **COMPOSITE YIELD TABLES, 01, 750701**

Short Title: YIELD

Narrative Description: This program generates a YIELD table and lists economic biologic and technical rotation ages for all R-9 species (composite). Input is present age, present height, present basal area, radial growth, height growth, maximum basal area at which a thinning is needed, mortality rate and opportunity value (increased volume because of fertilization), amount of trees to be cut on thinning, value of a cubic foot, current DBH and stand acreage. User guide available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Warren Hilgemann
USDA Forest Service
633 W. Wisconsin Avenue
Milwaukee, WI 53203
Telephone Numbers: FTS 362-3687,
FTS 362-3683

System or Program I.D. Number
24001042

Software Title: **REFORESTATION BID AWARDING PROGRAM, 01, 750330**

Short Title: PLANT

Narrative Description: The planting requirement of each planting area of a forest is read into the computer as well as the bids of each bidder. The program then awards the planting contracts in a near optimum (cost-wise) manner. User guide and program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Warren Hilgemann
USDA Forest Service
633 W. Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8-362-3687

System or Program I.D. Number
24001043

Software Title: **CHECK CRUISE SYSTEM, 01, 750601**

Short Title: CKCRUISE

Narrative Description: This system compares initial cruiser's data with the same data collected by a check cruiser and calculates the percent differences of several data variables. The sale summary data calculated from cruise data can be merged into the forest's year-to-date summary file. The sale summary data can also be printed. Output is used by check cruiser to certify cruisers and to validate sale volume. User guide and program documentation available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Eschle
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8-362-3655

System or Program I.D. Number
24001044

Software Title: **CRUISE DESIGN, 01, 750601**

Short Title: CKDESIGN

Narrative Description: The program calculates sample size required for a cruise of any sale area. The input data consist of the following items: coefficient of variation of the sale volume; individual stratum size and volume; and value per unit of measure (MBF or cubic feet etc.). User guide and program documentation available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Eschle
USDA Forest Service
633 W. Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8-362-3655

System or Program I.D. Number
24001045

Software Title: **COMBINING ERROR, 01, 750701**

Short Title: COMBINE-ERR

Narrative Description: Calculates total sale sampling error from individual sale stratum sampling errors weighted by the total stratum value. User guide and program documentation available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Eschle
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8-362-3655

System or Program I.D. Number
24001049

Software Title: **TIMBER SALE CRUISE, 01, 750811**

Short Title: SALECRUS

Narrative Description: The purpose of this program is to process the TIMBER SALE CRUISE data submitted from the field and compile and printout the desired sale information. Also this program will update and correct sales that were run at an earlier date and stored on the history tape.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001050

Software Title: **HEIGHT ACCUMULATION PROGRAM, 01, 750811**

Short Title: HA

Narrative Description: Computes volumes of trees given upper stem measurements and user option designations. See J. Forestry, vol. 67, no. 8, pp 554-555.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
T. R. Dell
Southern Forest Experiment Station
701 Loyola Avenue
New Orleans, LA 70013
Telephone Number: FTS 8 682 6781

System or Program I.D. Number
24001051

Software Title: **PER ACRE SUMMARY, 01, 750811**

Short Title: PERACRE

Narrative Description: Produces PER ACRE SUMMARY of tree data for fixed area field plot. See J. Forestry, vol. 67, no. 8, pp 554-555.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
T. R. Dell
Southern Forest Experiment Station
701 Loyola Avenue
New Orleans, LA 70013
Telephone Number: FTS 8 682 6781

System or Program I.D. Number
24001052

Software Title: **GROW, 01, 750811**

Short Title: GROW

Narrative Description: User provides initial stand information of number of stems, average DBH and average height for starting decade. For each decade thereafter he may receive a summary table of basal area, cubic and _ oard foot volumes and number of stems by DBH classes. This summary table may be modified by the user inputting specified cutting options for the stand. File element containing user documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Edward D. Day
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 323 5279

System or Program I.D. Number
24001053

Software Title: **MULTISTAGE SAMPLES, 01, 740101**

Short Title: MUST

Narrative Description: A program to handle multistage sampling up to three stages. Option 1 computes the optimum number of sampling units to select prior to sampling. Option 2 estimates the mean and variances of the continuous or discrete observations and then computes the optimum number of units. Option 3 is a special case of option 2 where there are an unequal number of subunits.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
Pat Williams
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 4912

System or Program I.D. Number
24001054

Software Title: **POLYNOMIAL CURVE FITTING,**
01, 650101

Short Title: POLY

Narrative Description: Program to fit 1st,2nd and 3rd degree curves to the following: (1) both variables arithmetic, (2) both variables logarithmic, (3) dependent variable logarithmic and (4) independent variable logarithmic. Data may be weighted or non-weighted. Program prints uncorrected and corrected matrices, with regression coefficients and correlation coefficient.

Mode Software Develope ` `er: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
E. C. Skinner - Pat Williams
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 3361 Ext 4946

System or Program I.D. Number
24001055

Software Title: **SIMULATING INTENSIVELY**
MANAGED ALLOWABLE CUT,
01, 720101

Short Title: SIMAC

Narrative Description: A computerized forest simulation model that calculates the allowable cut associated with the stated forest management plan for even-aged stands. It can maximize an even flow of cut for some specified management regime, or a series of cuts may be specified for as many as the first 10 decades followed by even flow. It computes a harvest rate based on present inventory and protected growth resulting from some or all of the following management practices: mortality salvage, precommercial and commercial thinning, commercial thinning only, forest genetics, and final harvest cuts.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
Bob Sassaman
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 4933

System or Program I.D. Number
24001056

Software Title: **SCATTER PLOT, 01, 700101**

Short Title: SCAT

Narrative Description: Program plots a graph for as many as 19 covariates, with one independent variable. The graph has 50 units for the dependent variable and 100 units for the independent variable. Scale is controlled by a control card. Program allows transgeneration.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
E. C. Skinner - Pat Williams
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 3361 Ext 4946

System or Program I.D. Number
24001057

Software Title: **ANALYSIS OF COVARIANCE, 01, 680101**

Short Title: RECO

Narrative Description: Computes analysis-of-covariance for one independent variable, with one to 17 covariates. From two to twenty source groups of unequal size may be compared.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
E. C. Skinner
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 3361 Ext 4946

System or Program I.D. Number
24001060

Software Title: **SOLVES EQUATIONS, 01, 670701**

Short Title: SOLV

Narrative Description: SOLVES EQUATIONS involving from one to twenty covariates. All variables may be in the same form as they appear on data file or may be transgenerated. The dependent variable may or may not appear on data card.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
E. C. Skinner - Pat Williams
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 503 234 3361 Ext 4946

System or Program I.D. Number
24001069

Software Title: **TIMBER TREE AND SHRUB INVENTORY, 01, 711215**

Short Title: TREE AND SHRUB INV

Narrative Description: The trees and shrubs inventory master is updated then sorted to list a report of planning a requisition for trees and shrubs first by artificial regeneration then by requisition kind.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001071

Software Title: **FOREST INVENTORY ACCESSABILITY,**
01, 720801

Short Title: ACCESS

Narrative Description: Given a set of forest inventory plots including measures of transport distances to market and estimates of transport cost per unit volumes, this program estimates the distribution of growing stock and allowable cut by transport cost to market.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1110

Technical Information Contact:
Dennis P Bradley
North Central Forest Experiment Station
23 Ave. E & 5th Street
Duluth, Minn. 55803
Telephone Number: FTS 8 783 9314

System or Program I.D. Number
24001073

Software Title: **AUTOMATED COST ANALYSIS,**
01, 691210

Short Title: TIMCOSTANAL

Narrative Description: Timber cost analyses are accomplished by extracting selected data from the PWP master and the stand exam master and listing acres worked divided by cost giving cost per acre.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001078

Software Title: **STAND EXAMINATION SYSTEM**

Short Title: STEX

Narrative Description: The STEX system compiles and evaluates timber stand information based on planned and accomplished activities within each stand. Various programs in the system edit, update, evaluate, extract, summarize, and list the data. All or portions of the master file may be listed.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001081

Software Title: **STEM ANALYSIS PLOT PROGRAM,**
01, 700101

Short Title: NOBLE

Narrative Description: A program to handle the section tree data from a tree stem analysis. Program reads the data for an individual tree from cards, re-proportions each section's measured radial increment data to the section average radius, and plots the re-proportioned data in the form of a tree stem profile.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6500

Technical Information Contact:
Donald J. Demars
PNW Experiment Station
P O Box 3141
Portland, Oregon 97208
Telephone Number: FTS 8 429 4912

2400 TIMBER MANAGEMENT — Continued

24001086

Software Title: **PROJECT WORK PLAN, 01, 750811**

Short Title: PWP

Narrative Description: PROJECT WORK PLAN reports are developed by extracting from the fiscal tapes PWP information plus their own data to produce a plan of project work.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001088

Software Title: **TIMBER INVENTORY, 01, 720230**

Short Title:

Narrative Description: These programs edit and compile information for timber management plans and program development. This information is developed from a sample of data on the forests. The timber management plan is the basic planning tool for all timber management activities on a national forest.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001090

Software Title: **PONDEROSA PINE VALUATION,**
01, 740701

Short Title: PPSV

Narrative Description: Used to derive selling values and over-run factors for log graded ponderosa pine. It includes the programs SREP (sales realization expectancies), LUSR (lumber sale report), and PPSV to arrive at these values on a yearly basis.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Danny Smith
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6213

System or Program I.D. Number
24001091

Software Title: **COMPARTMENT EXAMINATION,**
01, 750811

Short Title: EXAM

Narrative Description: Compiles stand examination data from fixed and/or variable plots. Prepares tabular summaries, statistical analysis and performs limited edit of input.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Bob Cottingham
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6213

System or Program I.D. Number
24001098

Software Title: **TIMBER RESOURCE STATISTICAL TABLES, 01, 710129**

Short Title: TIM-RST

Narrative Description: This program performs a statistical analysis of forested land, generating estimated volumes of saw timber by type by location.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, MT 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001103

Software Title: **MULTIPLE REGRESSION ANALYSIS, 01, 710611**

Short Title: MUREG

Narrative Description: Performs standard statistical analysis of multiple regression. For any number of observations on up to 140 variables. some output options include total and means, corrected and uncorrected sums of squares, STD errors, correlation matrix, standardized coefficients, regression coefficients and the STD errors, analysis of variance table for fitting regression, and the inverse of the matrix of corrected sums of squares and cross-products of the independent variables.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, MT 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
24001108

Software Title: **TAPER TABLES, 01, 700301**

Short Title: TPRT

Narrative Description: Sample data are extracted from timber sales accounting system for logs that have been divided into two or three pieces. The data is accumulated by forest, ranger district, species, top diameter and length. Program uses scale tables to measure diameter of pieces.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Marvin Rude
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6213

System or Program I.D. Number
24001109

Software Title: **TIMBER CRUISE, 01, 740701**

Short Title: TSCR

Narrative Description: Processes cruise data from four different sampling methods: Variable plot, fixed plot, sample tree measurement and 100 percent tree measurement. Some of the computed outputs are: Volume by species, trees per thousand by species and statistics for types and sales.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Marvin Rude
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6213

System or Program I.D. Number
24001110

Software Title: **RANDOM NUMBER GENERATOR INTERACTIVE, 01, 750512**

Short Title: RAND

Narrative Description: Provides an interactive terminal capability to input to subroutine RN3P to compute a list of random numbers for timber management to use in marking or scaling a specified number of trees or logs.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Edward D. Day
USDA Forest Service
11177 W. 8th Avenue
Lakewood, CO 80225
Telephone Number: FTS 8 234 4365

System or Program I.D. Number
24001111

Software Title: **3P TIMBER CRUISE, 01, 750712**

Short Title: 3PCR

Narrative Description: This program was written to use the 3P method of timber cruise with either variable plot, or sample tree measurement cruise methods. In addition volume determination is by: fell buck scale, total height, or log height volume determination methods. The 3P estimator variable may be either total height or gross volume.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Danny Smith
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6213

System or Program I.D. Number
24001113

Software Title: **VARIABLE PLOT, 780329**

Short Title: CSSG·R1LIB.VPLOT

Narrative Description: Calculates the VARIABLE PLOT sampling error and other statistics in preparation for national forest timber cruise in region 1.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Della Lemire
USDA Forest Service
Kootenai N.F.
Libby, Montana 59923
Telephone Number: Comm 406 293 6211 Thru FTS 585 5011

System or Program I.D. Number
24001114

Software Title: **SCALING FREQUENCIES, 780329**

Short Title: CSSG·R1LIB.SCALE

Narrative Description: The program computes SCALING FREQUENCIES for timber sales at 2% sampling error.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
User Support Group
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 585-3259

System or Program I.D. Number
24001115

Software Title: CLUST6, 760908

Short Title: CLUST6

Narrative Description: Does Q-mode cluster analysis on a distance function and produces a printed dendrogram.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gary Goodwin
USDA Forest Service
P.O. Box 310
Coeur D'alene Idaho 83814
Telephone Number: FTS 8-439-0111

System or Program I.D. Number
24001119

Software Title: SMALL ROUNDWOOD SALE VOLUME, 770715

Short Title: SRSV

Narrative Description: Calculate cubic foot volume of pulpwood timber sales and statistical summary of sampled sales.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
T.V. Lacher
USDA Forest Service
1720 Peachtree Rd. N.W.
Atlanta, GA 30309
Telephone Number: FTS 8 257 3846

System or Program I.D. Number
24001120

Software Title: SELLING PRICE PROGRAMS, 770630

Short Title: APRS

Narrative Description: Selling price info. collected from sample mills is edited, summarized and applied against mill-scale study data to produce average selling price and overruns for use in timber appraisals.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Barrett
USDA Forest Service
1720 Peachtree Rd., N.W.
Atlanta, GA 30309
Telephone Number: FTS 8 257 3846

System or Program I.D. Number
24001121

Software Title: SEED ORCHARD INVENTORY, 770930

Short Title: ORCH

Narrative Description: Maintains inventory of all ramets in seven R8 seed orchards. Produces utility reports to aid in orchard thinning and clone performance evaluation.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ralph Lewis
USDA Forest Service
1720 Peachtree Rd., N.W.
Atlanta, GA 30309
Telephone Number: FTS 8 257 3846

System or Program I.D. Number
24001123

Software Title: **NET VOLUME,
SURFACE AREA,
AND LENGTH**

Short Title: NETVSL

Narrative Description: NETVSL is a comprehensive computer program that calculates the net and gross volume, surface area, and length of tree boles from stem measurements. These measurements can be obtained either from felled trees, or taken by a dendrometer from standing trees. Volume units include cubic feet and board feet (scribner and/or int 1/4 inch log scale). Total stem contents (including forks) and merchantable contents are calculated for each of the three kinds of volume units.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dan Schroeder
USDA Forest Service
3825 E. Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1401

System or Program I.D. Number
24001125

Software Title: **ANNUAL PERCENT GROWTH, 771013**

Short Title: R9-TIMBER*ANN-PCT-GRO

Narrative Description: This system is designed to calculate ANNUAL PERCENT GROWTH for timber sale appraisals. Either method described in section 104 of FSH 2409.24, timber sale preparation handbook, may be used.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Eldred Johnson
USDA Forest Service
633 W. Wisconsin Ave.
Milwaukee, Wisconsin 53203
Telephone Number: FTS 8 362 3684   Comm 414 291 3684

System or Program I.D. Number
24001127

Software Title: **TIMBER SALE TRANSACTION
EVIDENCE APPRAISAL,
771111**

Short Title: R9-TRANS-EV

Narrative Description: This system utilizes a data base of sold and no-bid timber sale data to calculate transaction evidence appraisal data for a specified time period for any combination of districts within a national forest.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Maurice Peace
USDA Forest Service
633 W. Wisconsin Ave.
Milwaukee, WI 53203
Telephone Number: FTS 8 362 3277   Comm 414 291 3277

System or Program I.D. Number
24001130

Software Title: **MINIMUM COST
CALCULATION FOR CONTAINER PLANTING**

Short Title: MINC

Narrative Description: This program calculates the costs incurred by use of different numbers of seeds per cell, under three options for nurserymen who grow containerized seedlings.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dan Schroeder
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1401

System or Program I.D. Number
24001163

Software Title: **TMCRUS 77120677**

Short Title: TCRRO3

Narrative Description: This program makes a sale analysis for check cruises on a time-share terminal.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter   Computer Systems
USDA Forest Service R3
517 Gold Ave. S.W.
Albuquerque NM 87102
Telephone Number: Comm 505 766 2591   FTS 474 2591

System or Program I.D. Number
24001164

Software Title: **TIMBER APPRAISAL, 01, 770812**

Short Title: R5˙FS.TAR2400-17

Narrative Description: This program enables timber appraisers to perform the calculations needed for the front of the appraisal summary, form 2400-12. Principle features include interactive prompting for all input values needed, printing of a close approximation of the actual form 2400-17, the ability to save all input data for later changes or updates, and a convenient update capability.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo, Tom Smithberger
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
24001165

Software Title: **SILVACULTURAL ACCOMPLISHMENT REPORTING, 03, 771113**

Short Title: SAR

Narrative Description: Program SAR audits field entries for inform SILVACULTURAL ACCOMPLISHMENT REPORTING and converts those entries to the proper values, formatted for loading into file TM-SILVA. Either an initial run or an error run may be done.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
24001166

Software Title: **PLOT STX**

Short Title: PSTX, 770202

Narrative Description: Region 5 modification of Grosenbaugh's 1967 version of stx allows input of plot as well as tree number. Computes cubic feet, scribner, and international volumes to various integer fixed top diameters and average utilized top diameters as well as to tip of the tree.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Frank Oyung, Tom Smithberger
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Numbers: FTS 556 4464,
556 6274

System or Program I.D. Number
24001167

Software Title: **TIMBER APPRAISAL CRUISE REPORT,**
771212

Short Title: TACR

Narrative Description: For timber appraisal cruises from fixed dimension plots or individual sample trees. Prints board foot and cubic foot volume estimates, estimated sales realizations, and sampling errors by tree species groups.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
   Frank Oyung, Chuck Stadelman
   USDA Forest Service
   630 Sansome St.
   San Francisco, CA 94111
   Telephone Numbers: FTS 556 4464,
                 556 6274

System or Program I.D. Number
24001168

Software Title: **POINT SAMPLING TIMBER APPRAISAL**

Short Title: PSTACR, 771212

Narrative Description: For timber appraisal cruises from variable-radius plots. Prints board foot and cubic foot volume estimates, estimated sales realizations, and sampling errors by tree species groups.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
   Frank Oyung
   USDA Forest Service
   630 Sansome St.
   San Francisco, CA 94111
   Telephone Number: FTS 556 4464

System or Program I.D. Number
24001169

Software Title: **TIMBER PRICING UPDATE REPORT**

Short Title: TIMPRICE, 770303

Narrative Description: Timber price update report places new selling prices and manufacturing costs onto disk file for program TACR, PSTACR, and PPP101 to use. Input is lumber selling price/cost by lumber grade. Output is log scale price/cost by lumber grade. Region 5 specific.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
   Chuck Stadelman, John Hahn
   USDA Forest Service
   630 Sansome St.
   San Francisco, CA 94111
   Telephone Numbers: FTS 556 6274,
                 556 4192

System or Program I.D. Number
24001170

Software Title: **PPP TIMBER APPRAISAL**
CRUISE REPORT,
01, 750214

Short Title: PPP101, 770705

Narrative Description: Timber appraisal cruise report from 3P cruise sampling. Prints board foot and cubic foot volume estimates, estimated sales realization, sampling errors and stand table by species and species groups.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
   Frank Oyung, Chuck Stadelman
   USDA Forest Service
   630 Sansome St.
   San Francisco, CA 94111
   Telephone Numbers: FTS 556 4464,
                 556 6274

2400 TIMBER MANAGEMENT—Continued

Software Title: MODIFIED STX PROGRAM

Short Title: STXMOD

Narrative Description: Modification of original STX program for forest inventory and cruising. Program allows input of plot as well as tree number. Computes cubic feet, scribner, and international volumes to various integer fixed top diameters and average utilized top diameters as well as to tip of the tree.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dan Schroeder
USDA Forest Service
3825 E. Mullberry St.
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1401

Software Title: ANNUAL PERCENT GROWTH SYSTEM

Short Title: R9-TIMBER*ANN-PCT-GRO

Narrative Description: The system consists of 4 programs and 1 subroutine. It will compute and print the annual percent growth of trees for timber sale appraisals. Annual percent growth is computed by either the diameter comparison method or the increment core method. Data can be input manually from the terminal or use a previously created data file.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Richard Hesse
USDA Forest Service
633 W. Wisconsin Ave.
Milwaukee, WI 53203
Telephone Number: FTS 362-3161

2500 WATERSHED MANAGEMENT

Software Title: MANN4, 01, 741209

Short Title: MANN4

Narrative Description: This conversational program determines peak flows according to the Mannings formula. The R-3 users guide is available to users for instruction.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

Software Title: HRZH20, 01, 741212

Short Title: HRZH20

Narrative Description: This program computes the moisture content, vegetation, rock, and % of moisture held in a single soil profile by individual horizons. It will output tables containing soil moisture values of different slopes. The program is conversational and aids in soil regim studies. A users guide is available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jerry Walker
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2466

System or Program I.D. Number
25001006

Software Title: **EROSION, 01, 741209**

Short Title: EROSON

Narrative Description: A conversational program designed to generate an array of onsite EROSION rate estimates by inputting EROSION rate of soil, erodibility of soil surface, precipitation, slope, and vegetative cover densities. A users guide is available,.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

System or Program I.D. Number
25001007

Software Title: **REGIM3, 01, 741212**

Short Title: REGIM3

Narrative Description: REGIM3 is a program designed to compute soil moisture regimes. The program is designed to provide reports which aid in land use planning, range analysis, timber regeneration, watershed management, and soil classification. Reports include moisture tables, soil types, and thickness tables. A users guide plus a section within the DOC processor is available to users.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jerry Walker
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2446

System or Program I.D. Number
25001008

Software Title: **WATER RIGHTS**
INVENTORY PROGRAMS,
01, 750120

Short Title:

Narrative Description: System stores such data as type of water development, name of source, location of diversion, season of use, year of first use, reservation data, date of water right application, date of adjudication, etc. Summaries of various types by district, watershed or forest may be run. Program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Chuck Stury
USDA Forest Service
517 Gold Ave. S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2446

System or Program I.D. Number
25001009

Software Title: **TEMPERATURE/ELEVATION,**
01, 741212

Short Title: TPELEV

Narrative Description: The program calculates monthly average temperatures and total monthly precipitation for specific elevations from previous stored data by using regression techniques. A users guide is available .

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jerry Walker
USDA Forest Service
517 Gold S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2446

System or Program I.D. Number
25001010

Software Title: **STORAGE & RETRIEVAL OF CLIMATIC DATA, 01, 750701**

Short Title: STORCL

Narrative Description: The STORCL system was developed to store, update, retrieve, edit and summarize data generated by a barometer watershed climatic station. The data is summarized on a daily, weekly, monthly and yearly basis. Provision is also made for the interactive aligning of data using the shift/rotate process.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42, CDC 3100

Technical Information Contact:
Bill Green
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 586 6561

System or Program I.D. Number
25001012

Software Title: **HYDRAULICS OF BRIDGE BACKWATER, 01, 750327**

Short Title: HYD

Narrative Description: HYDRAULICS OF BRIDGE BACKWATER program used for calculation of section properties, bridge backwater, cross section plot and rating curve plot.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., N.W., Suite 215
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
25001016

Software Title: **WATERSHED SUMMARY FOR FISHER-PORTER RECORDER, 01, 750811**

Short Title: WATERSHED

Narrative Description: Summarizes data regarding ephemeral runoff from small watersheds. See USDA FS research note SO-138.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
T. R. Dell
Southern Forest Experiment Station
701 Loyola Avenue
New Orleans, LA 70013
Telephone Number: FTS 8 682 6781

System or Program I.D. Number
25001030

Software Title: **SEDIMENT ROUTING & YIELD PREDICTION, 01, 750712**

Short Title: SEDROUTE

Narrative Description: SEDROUTE is used to compare the effects of proposed land use activities on erosion, sediment yield and water yield within a series of successively larger watersheds. The program then, for both existing and future conditions, calculates the amount and percent of change in erosion, sediment and water yield.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Kelly
USDA Forest Service
427 N. Sixth Ave.
Pocatello, Idaho 83201
Telephone Number: FTS 8 554 6245

System or Program I.D. Number
25001031

Software Title: **WATER INVENTORY, 01, 750714**

Short Title: WSMC

Narrative Description: Water use requirements and rights inventory obtained from detailed drainage maps of all states in the region. System consists of sorts, update, extract programs and data modification programs.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Ron Tew
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6561

System or Program I.D. Number
25001034

Software Title: **HYDROLOGIC MODEL**

Short Title: HYMO

Narrative Description: Model and route surface runoff and sediment production from watersheds.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323 1417

System or Program I.D. Number
25001035

Software Title: **WATERSHED INVENTORY**

Short Title: WATINV

Narrative Description: WATERSHED INVENTORY system provides an edit, update capability of all water rights and water uses. It provides the following reports: (1) water rights of others valid and not valid against the U.S., (2) current and foreseeable water uses of land reserved and not reserved by public domain by purpose and season of use. Via use on control cards, other inventory reports may be extracted as required.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mildred L. West
USDA Forest Service Region 2
11177 W. 8th Ave.
Lakewood, Colorado 80225
Telephone Number: FTS 8 234 5570

System or Program I.D. Number
25001036

Software Title: **DOCUMENTATION OF WSDG PROGRAMS, 770501**

Short Title: USERGUIDE

Narrative Description: A program which uses the UNIVAC document processor to retrieve and print abstracts, documentation, and up-to-date instructions on how to access and execute all WSDU supported programs.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417   Comm 303 482 0356

System or Program I.D. Number
25001052

Software Title: **HYDROLOGIC SIMULATION MODEL OF COLORADO SUBALPINE FOREST**

Short Title: WB MODEL

Narrative Description: The model is designed to simulate the total water balance on a continuous, year-round basis, and to compile the results from individual hydrologic subunits into a composite overview of an entire subalpine watershed. The model has been designed to simulate watershed management practices and their resultant effects on the behavior of hydrologic systems. The model consists of (1) a 'CORE' which performs the actual simulation and (2) Peripheral Routines which specify hydrologic subunit parameters, obtain input data, maintain continuity between simulation intervals, and output the results.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mark Spearnak
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

System or Program I.D. Number
25001053

Software Title: **PLOT WEIR, POND OR CHANNEL CROSS SECTION**

Short Title: PLOTD

Narrative Description: Companion program to be used in conjunction with debris. Plots and computes cross-sectional areas using same data base as debris.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mark Spearnak
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

System or Program I.D. Number
25001054

Software Title: **ROUTING OF ACIDIC WATERS THRU STREAM SYSTEM**

Short Title: ACID

Narrative Description: A program to evaluate downstream changes in acidity % phl due to upstream influxes of acidic waters. Routes this acidic influx downstream.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mark Spearnak
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

System or Program I.D. Number
25001055

Software Title: **TABULATION OF SEDIMENT DATA**

Short Title: SEDTAB

Narrative Description: Outputs tables containing values of rainfall excess, time to ponding, and soil detachment given rainfall input. This program also outputs tables showing sediment discharges for various slope and canopy conditions.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gordon Warrington
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

System or Program I.D. Number
25001056

Software Title: **SIMULATION OF SEDIMENT YIELD**

Short Title: SIMSED

Narrative Description: Determines water and sediment yield for a simple plane surface with vegetation.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gordon Warrington
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

System or Program I.D. Number
25001057

Software Title: **PROSPER**

Short Title: PROSPER

Narrative Description: PROSPER is a phenomenological model that simulates atmosphere plant-soil moisture relations on a day to day basis. A water balance is applied to a stand of vegetation with the soil divided into several layers. Canopy geometry is taken into consideration in the albedo term for solar radiation. A combined energy balance - aerodynamic method is used to derive an equation for evapotranspiration as a function of a resistance to vapor transfer. The flow of water within and between soil and plant is a function of soil conductority, soil water potential, root characteristics for each soil level and surface water potential.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mark Spearnak
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1417

2600 WILDLIFE MANAGEMENT

System or Program I.D. Number
26001001

Software Title: **WILDLIFE**

Short Title: WILDLIFE

Narrative Description: Takes data from region and builds a current master file while generating reports. Then a ten year history file is updated, producing a comparative report on the species reported. The annual report produces summary data by region and forest WILDLIFE specie and habitat improvement for the year. The history file is kept for specie only. The data is edited, then reports on region and forest are run. A state report is run, followed by the history report. User instuctions are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42, IBM 360

Technical Information Contact:
R. W. Phillips
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 235 8015

System or Program I.D. Number
26001002

Software Title: **WILDLIFE SYSTEM, 01, 760701**

Short Title: WILDLIFE

Narrative Description: The WILDLIFE SYSTEM annually processes information from all forest service regions obtained from WILDLIFE report from 2600-1 (5/75). The information provides statistical reports for estimated population of big game animals and hunter harvest of 23 animal endangered species. Habitat improvements on national forests/grasslands, dollars spent and by whom printed by national forest, region and state breakdowns. The information also provides ten year historical data of comparitive population totals for population/harvest of 23 animal endangered species, and accumulates number of bald eagle nests.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
R. W. Phillips
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 235 8015

Software Title: **TIMBER AND DEER FOOD
POTENTIAL IN LOBLOLLY PINE PLANTATIONS**

Short Title: TIMHAB

Narrative Description: This computer program analyzes both timber and deer food production on managed forests, providing estimates of the number of acres required per deer for each week or month, yearly timber cuts, and current timber growing stock, as well as a cost and return analysis of the timber operation. The program is applicable to loblolly pine plantations in east Texas and Louisiana but can be readily modified for other species or areas.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: XER 560,
                                  IBM 370,
                                  CDC 6400, UNI 1108

Technical Information Contact:
  Richard N. Conner
  Southern Forest Experiment Station
  Box 7600, S.F.A.
  Nacogdoches, Texas 75962
  Telephone Number: Comm 713 569 7981 Thru FTS 749 1011

Software Title: **DEER POPULATION
DYNAMICS SIMULATION MODEL,
761200**

Short Title: DEER SIMULATION MODEL

Narrative Description: Simulation model is data-based requiring information on both deer population and environmental variables. Model parameters include deer population parameters of numerical abundance, sex and age structure and composition, natality rates, mortality rates, and exploitation rates. Population regulatory mechanisms are incorporated in the model through positive and negative feedback loops. Cause-and-effect environmental pathways impacting the deer population parameters are defined through alternative harvest strategies, climatic variables, forage yields, forage nutritive values, and deer fat reserves indices.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6400/6600

Technical Information Contact:
  Dean E. Medin
  Intermountain Forest And Range Experiment Station
  316 E. Myrtle
  Boise, Idaho 83706
  Telephone Number: FTS 554-1457

2700 LAND USES MANAGEMENT

Software Title: **LAND USE REPORTS, 01, 750124**

Short Title: LUR

Narrative Description: An inventory system of land use permits, special uses, right-of-ways and easements. it furnishes Forest Service administrators with management data for planning and budgetary purposes, generates forms for billing and collecting revenues, and retrieves special data for input to the GIM data base. Program documentation, operations manual and a users guide are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Gene Welch
  USDA Forest Service
  P.O. Box 2417
  Washington, DC 20013
  Telephone Number: FTS 8 447 4313

Software Title: **COMPUTER MAPPING FOR
LAND USE PLANNING,
01, 720630**

Short Title: COMLUP

Narrative Description: A basic information storage and retrieval system containing a data base of physiographic or man-made features represented as geographical coordinates. A rectangular coordinate system of x and y coordinates oriented to a local coordinate system is used. The objective of the system is to select combinations of data from the data base and produce composite maps which are in the form of a grid matrix or a line plot acreage computation is also made.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact·
  Cecil Webb
  USDA Forest Service
  324-25th Street
  Ogden, Utah 84401
  Telephone Number: FTS 8 586 6836

System or Program I.D. Number
27001004

Software Title: GENERAL MAPPING, 780329

Short Title: FS*R1.MAPIT3

Narrative Description: FS*RI.MAPIT3 is a GENERAL MAPPING program that generates a map representation of a topographical area from a matrix of map cells.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Doris L. Matz
USDA Forest Service
Sandpoint, Idaho
Telephone Number: Comm 208 264 5111 Thru FTS 554 1111

System or Program I.D. Number
27001005

Software Title: LAND USE ALLOCATION, 760908

Short Title: LUA

Narrative Description: To identify land use opportunities and allocate land uses based on the land's ability to support various uses as well as on the compatibility of different uses when occuring together on the same piece of land.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Doris Matz
USDA Forest Service
Sandpoint, Idaho
Telephone Number: Comm 208 264 5111 Thru FTS 554 1111

3000 STATE AND PRIVATE FORESTRY

System or Program I.D. Number
30001003

Software Title: S & PF ACCOMPLISHMENT
REPORTING SYSTEM PACKAGE

Short Title:

Narrative Description: Edits, sorts and tabulates S&PF accomplishment data submitted by states on six forms described in FSH 3090.11, state and private accomplishment reporting system. Only forms 3200-6, Cooperative Forestry Assomplishment Report, and 5200-17, Forest Insect and Disease Management Accomplishment Report are completely automated. However, all forms are designed for ADP and system linkages are maintained to automate the rest as need arises. Documentation consists of unpublished programmers notes and user instructions as well as listings and sample runs.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mark Goforth
USDA Forest Service
P.O. Box 2417
Washington, D.C. 20013
Telephone Number: FTS 447-8921

System or Program I.D. Number
30001005

Software Title: RESOURCE ANALYSIS PROCEDURE

Short Title: RAP

Narrative Description: RAP is a cellular mapping system using either hand coded or digitized data as input, has multiple overlay capability, produces acreage reports, performs statistics, internal linear program, scale adjustments, edit routines and map file management.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Max R. Keetch
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323-1447

3200 COOPERATIVE FORESTRY

System or Program I.D. Number
32001002

Software Title: **SCALING VOLUME COMPILATION,**
01, 750327

Short Title: SWS3P

Narrative Description: Sample weight scaling program using 3P (probability proportional to prediction) sampling. Users guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Chuck Chehock
USDA Forest Service
1720 Peachtree Rd NW, Suite 711
Atlanta, GA 30309
Telephone Number: FTS 285 3611

3400 FOREST INSECT AND DISEASE MANAGEMENT

System or Program I.D. Number
34001001

Software Title: **REPORTING/RETRIEVAL SYS, 760809**

Short Title: IDARRS

Narrative Description: A storage and retrieval system for insect and disease detection and suppression accomplishment data.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Robert Uhler
S&PF
1720 Peachtree St., NW
Atlanta, GA 30309
Telephone Number: FTS 285-3734

System or Program I.D. Number
34001002

Software Title: **INSECT SURVEY,**
01, 720601

Short Title: INSECT

Narrative Description: Provides summaries and analytical information from INSECT damage surveys such as number of trees/acre, tree class, etc. Will handle fixed plots, variable point samples and strip cruise data.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Don Curtis
USDA Forest Service
324 25th Street
Ogden, UT 84401
Telephone Number: FTS 586 6141

System or Program I.D. Number
34001007

Software Title: **SOUTHWEST SUMMARY, 771207**

Short Title: SWSR03

Narrative Description: The program SWSUMMARY prepares stand summary tables and calculates SWYLD2 stand condition variables from survey data. Stand tables summarize density and disease incidence data collected on two series of plots, fixed radius and variable plots. The program also summarizes age and height information for three sets of selected trees. Finally, the program lists the SWYLD2 card type 5 stand condition variables.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Sal Davila, Computer Systems
USDA Forest Service
517 Gold Ave. SW
Albuquerque, NM 87102
Telephone Numbers: Comm 505 766 2591,
FTS 474 2591

System or Program I.D. Number
34001008

Software Title: **PEST**

Short Title: PEST

Narrative Description: Program compiles information on up to eight distinct tree damage classes, prints stand summary tables of trees per acre and square feet per acre by DBH classes, and computes statistics for each damage class total. Program summarizes forest insect and/or disease damage to trees and stands.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
R. E. Acciavatti
USDA Forest Service
517 Gold Ave. SW
Albuquerque, NM 87102
Telephone Numbers: FTS 474-2440,
Comm 505 766-2440

3500 COOPERATIVE WATERSHED MANAGEMENT

System or Program I.D. Number
35001001

Software Title: **MAPPING INFORMATION ASSEMBLY DISPLAY SYSTEM, 01, 750327**

Short Title: MIADS

Narrative Description: A land resource mapping system utilizing various source data to provide maps and overlays of land resource conditions on watersheds and river basins.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
George Dissmeyer
SE area, S&PF
1720 Peachtree Rd, N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4663

System or Program I.D. Number
35001002

Software Title: **COMBINATIONS OF FILES, 01, 750327**

Short Title: COMBINES

Narrative Description: A land resource mapping system, utilizing data generated by MIADS system, to provide land maps, etc. of watersheds and river basins.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
35001003

Software Title: **COMPUTERIZED HYDROLOGICAL ANAL OUTPUT SYST, 01, 750327**

Short Title: CHAOS1

Narrative Description: This system analyzes the field data to compute erosion rates and runoff characteristics. the output in turn becomes the input to the CHAOS2 and CHAOS3 programs.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
George Dissmeyer
SE Area S&PF
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4663

System or Program I.D. Number
35001004

Software Title: **COMPUTERIZED HYDROLOGICAL ANAL OUTPUT SYST, 01, 750327**

Short Title: CHAOS2

Narrative Description: This system generates tables of average erosion rates and range characteristics, thus describing erosion and runoff conditions. The input to the program is the data obtained from CHAOS1. The output may or may not be used as input to CHAOS3.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
George Dissmeyer
SE Area S&PF
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4663

System or Program I.D. Number
35001005

Software Title: **COMPUTERIZED HYDROLOGICAL ANAL OUTPUT SYST, 01, 750327**

Short Title: CHAOS3

Narrative Description: This system computes erosion, sediment production and areas of disturbance for a planning area. The input is the data obtained from CHAOS1 and CHAOS2.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
George Dissmeyer
SE Area S&PF
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4663

System or Program I.D. Number
35001006

Software Title: **WILDLIFE HABITAT EVALUATION PROGRAM, 01, 750327**

Short Title: WHEP

Narrative Description: This program analyzes data gathered from habitats for an animal under study and translates data into potential carrying capacity or population.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
George Dissmeyer
SE Area S&PF
1720 Peachtree Rd., N.E.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4663

System or Program I.D. Number
3500 1007

Software Title: **HYDROLOGIC EXTRACT AND REPORT,**
770715

Short Title: HYDRO

Narrative Description: This system builds, maintains, and reports from a master file based on the SHO1 card format used in the Black Hills integrated storage and retrieval input card system. This record represents hydrologic map data. The HYDRO system is especially oriented to extraction and reporting of acreage of different categories in the SHO1 record.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Coryell Ohlander
USDA Forest Service
11177 W. 8th Ave.
Lakewood, CO 80225
Telephone Number: Comm/FTS 303-234-4323

4000 RESEARCH (GENERAL)

System or Program I.D. Number
4000 1005

Software Title: **COLEMAN SOIL MOISTURE**
UNIT CONVERSION,
01, 720105

Short Title:

Narrative Description: The program converts meter readings obtained with a Coleman soil moisture and temperature meter to either soil moisture percent or temperature.

Mode Software Developed for: Batch

Computer Manufacturer and Model: IBM 370-155

Technical Information Contact:
Richard C. Schlesinger
USDA, Forest Service
Forestry Science Laboratory
Carbondale, Ill 62901
Telephone Number: Comm 618 453 2318

System or Program I.D. Number
4000 1006

Software Title: **COMPUTER ORIENTED**
METEOROLOGICAL DATA SYSTEM,
751201

Short Title: COMDAT

Narrative Description: COMDAT is a system to organize, check, file, or retrieve meteorological data. Data records may be extracted in large amounts or small blocks for analysis.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 6400

Technical Information Contact:
R. William Furman
Rocky Mountain Forest And Range Experiment Station
240 W. Prospect
Fort Collins, CO 80526
Telephone Numbers: FTS 323-1262,
Commercial 303-482-7332

System or Program I.D. Number
40001007

Software Title: SO RES. PAPERS 96 AND
97 YIELD PROGRAM,
741231

Short Title: SBS0965097

Narrative Description: Program produces yield tables for unthinned, old field, plantations in Tenn. Ala. and Ga. highlands for loblolly pine (see so res. paper 96, 1974) or shortleaf pine (SE SO Res. Paper 97, 1974).

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
Tom Dell
SFES, Statistical Methods
701 Loyola Ave
New Orleans, LA 70113
Telephone Number: FTS 682-6781

4100 TIMBER MANAGEMENT RESEARCH

System or Program I.D. Number
41001005

Software Title: **ANALYSIS OF VARIANCE FOR RANDOMIZED COMPLETE BLOCK EXPERIMENTS**

Short Title: RCBM

Narrative Description: Program is intended for the ANALYSIS OF VARIANCE FOR RANDOMIZED COMPLETE BLOCK EXPERIMENTS with or without missing plots, and especially suited for very large experiments with missing plots (such as variety trials) which are difficult to analyze with standard least squares programs.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100

Technical Information Contact:
George Keith
USDA Forest Service
P.O. Box 2008, GMF
Gulfport, MS 39503
Telephone Number: FTS 499-2632

System or Program I.D. Number
41001007

Software Title: **STEM-AND-LEAF WITH BASIC STATISTICS OF UNGROUPED DATA**

Short Title: STEM-AND-LEAF

Narrative Description: This program constructs Tukey's STEM-AND-LEAF display of the sample data and computes various basic sample statistics. Stem-and-leaf displays are similar to histograms, but are more powerful in exposing outliers and various other abnormal features.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: HPC 9830

Technical Information Contact:
Anthony Rayford
USDA Forest Service
P.O. Box 2008, GMF
Gulfport, MS 39503
Telephone Number: FTS 499-2632

System or Program I.D. Number
41001012

Software Title: **PLOTTING MULTI-DIMENSIONAL DATA**

Short Title: MD-PLOT

Narrative Description: Program applies D. F. Andrews' method of plotting multidimensional data. The program is easy to use, provides plots of both low and high resolution, and accepts large data sets.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100

Technical Information Contact:
George Keith
USDA Forest Service
P.O. Box 2008, GMF
Gulfport, MS 39503
Telephone Number: FTS 499-2632

4300 WATERSHED AND AQUATIC HABITAT RESEARCH

System or Program I.D. Number
43001001

Software Title: **WATERSHED FISCHER PORTER, 680615**

Short Title: WSFP

Narrative Description: Purpose is computation of streamflow. Input is water level at 2-minute intervals during streamflow and rating table for flume in which water level has been recorded on paper tape with Fischer-Porter analog-to-digital recorder. Data translated from tapes and put on cards is input. Printout is time, water level, flow rate, and volume of streamflow in cubic feet and area-inches for each 2-minute interval and cummulated volumes for storms, days, months, and year.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
Bonnie Polmer, Tom Dell
SFES, Statistical Methods
701 Loyola Ave., Rm. 9023
New Orleans, La. 70113
Telephone Number: FTS 8 682 6781

System or Program I.D. Number
43001002

Software Title: **WATERSHED FISCHER PORTER EDIT, 700126**

Short Title: WSFPEDIT

Narrative Description: Program used to determine if all segments of punched tape (from Fischer-Porter analog-to-digital water level recorder) have been translated and to locate incorrect data before starting streamflow computations. Reads all punched cards produced in tape translation. Prints data (date, time, and water levels) on beginning and ending card for each segment. Compares each water level with preceding water level. Prints data from cards with unexpected changes in water level so they can be checked and changed if needed.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
Bonnie Polmer
SFES, Statistical Methods
701 Loyola Ave., Rm 9023
New Orleans, La. 70113
Telephone Number: FTS 682 6781

System or Program I.D. Number
43001003

Software Title: **NEUTRON PROBE-SOIL
WATER EQUIVALENTS,
770102**

Short Title: NPDC

Narrative Description: Converts soil moisture neutron probe readings to soil water equivalents for each soil depth. Up to 15 successive measurements for as many as 200 depth increments can be run as one problem. Output is printed soil water equivalent for each depth; accumulated water equivalents by depth; differences in water equivalents between successive readings; and accumulation of differences over depth.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1108

Technical Information Contact:
Tom Popham
SFES, Statistical Methods
701 Loyola Ave. Rm. 902B
New Orleans, LA 70113
Telephone Number: FTS 682-6781

4400 FOREST FIRE AND ATMOSPHERIC SCIENCES RESEARCH

System or Program I.D. Number
44001002

Software Title: **WORLD FIRECLIMATES, 02, 770801**

Short Title: FIRE 21

Narrative Description: From monthly climatic data program computes and compiles monthly probability of fire occurrence and mean monthly burning index.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
C. Chandler
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS/comm (703) 235-8195

System or Program I.D. Number
48001001

Software Title: **TIMBER RESOURCE ANALYSIS SYSTEM, 01, 720814**

Short Title: TRAS-AUTOCAL

Narrative Description: TRAS-AUTOCAL is the most comprehensive version of the TIMBER RESOURCE ANALYSIS SYSTEM. This system is a stand-table model for the projection of future timber inventory, net growth, mortality, and removals. At least seven versions of TRAS are in use throughout the U.S. They differ from each other in stage of development and in the amount of modification made to meet local needs. This report is intended to cover all versions. This program is documented in the AG. handbook #377.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Marcus H Goforth
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 8921

System or Program I.D. Number
48001003

Software Title: **NATIONAL TABLES SYSTEM, 01, 750106**

Short Title: NATABE

Narrative Description: NATABE is the data handling system used to generate the statistical tables for the 1970 national appraisal of timber entitled The Outlook for Timber in the United States. Data editing, file management, computation, sorting, and report generation are all functions of this system. The system will eventually be expanded to recognize certain non-timber forest resources as well.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Marcus H Goforth
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 8921

System or Program I.D. Number
48001004

Software Title: **NET VOLUME SURFACE LENGTH, 01, 750106**

Short Title: NETSVL

Narrative Description: NETSVL calculates gross and net volume, surface area and length from stem measurements. Tree input data include measurements of lengths, diameters, and cull dimensions obtained from felled trees. Volume units include cubic feet, scribner and international 1/4-inch log scales.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Thorne
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 7495

System or Program I.D. Number
48001005

Software Title: **FIRE DAMAGE APPRAISAL, 01, 750106**

Short Title:

Narrative Description: The FIRE DAMAGE APPRAISAL programs calculate the number of trees, board foot volume, and cubic foot volume per acre for before and after fire conditions.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Thorne
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 7495

System or Program I.D. Number
48001006

Software Title: **SYSTEM MULTIPLOY - A
SIMULATION LANGUAGE,
01, 750124**

Short Title: MULTIPLOY

Narrative Description: MULTIPLOY is a user-oriented language to simulate timber and other outputs of forest land management regimes on a single track or project (or a series of tracts or projects). It evaluates physical and financial returns of managerial options in terms of income per acre, rate-of-return on investment, long-run average revenues and costs, and required capital expenditures. Input is free-form english statements. A users guide, program manual and training manual are available for instruction.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Clark Row
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447-6327

5100 FIRE MANAGEMENT

System or Program I.D. Number
51001002

Software Title: **ADMIN FOREST FIRE INFO
RETRIEVAL MGMT,
01, 750113**

Short Title: AFFIRMS

Narrative Description: A user-oriented interactive computer program designed to permit entry of fire-weather observations from field stations simultaneously over a large network. Fire weather data is entered from any of a number of data-terminals. Then that data and the associated fire indices may be displayed at any other terminal in the network.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: GE-600 SERIES,
TIMESHARING SYSTEM

Technical Information Contact:
John E. Deeming
Boise Interagency Fire Center
3905 Vista Avenue
Boise, ID 83705
Telephone Number: FTS 208 342-9284 Comm 208 342-6851

System or Program I.D. Number
51001006

Software Title: **R8 - FIRE DATA SYSTEM, 01, 750327**

Short Title: FIRDAT

Narrative Description: The systems maintains data files of forest fire records beginning with 1960 data. The system is in three parts: 1) file maintenance, 2) monthly reports, and 3)special data retrieval.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., N.W. Suite 215
Atlanta, GA 30309
Telephone Number: FTS 8 257-4140

System or Program I.D. Number
51001007

Software Title: **MONTHLY FIRE REPORT, 01, 750630**

Short Title: MFIRE

Narrative Description: Fire information by forest for Region 4. Run monthly for all classes of fires on forest land. Accumulates a year to date total.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
John Steffens
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586-6891

System or Program I.D. Number
51001014

Software Title: **FIRE RETARDANT FLIGHT LOG, 760908**

Short Title: RETDROP

Narrative Description: Provides immediate access to fire-retardant flight log statistics and summaries at both forest and regional levels.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

USFS User Support Group
USDA Forest Service
Missoula, MT 59801
Telephone Number: FTS 8 585-3823

System or Program I.D. Number
51001015

Software Title: **DOWNED FUEL INVENTORY, 780329**

Short Title: CSSG*R1LIB.DFINV

Narrative Description: This program performs calculations described in the "Handbook for Inventorying Downed Woody Material" by James K. Brown (USDA Forest Service General Technical Report Int-16, 1974).

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Denney
USDA Forest Service
P.O. Box 147 290 No. Main
Kalispell, MT 59901
Telephone Number: FTS 8 585-3104

System or Program I.D. Number
51001018

Software Title: **FIRE QUALIFICATION SYSTEM, 741122**

Short Title: FQS

Narrative Description: Based upon employees' previous fire assignments, recent fire experience, prior fire training, and physical fitness, the system will provide reports indicating potential fire qualifications, fire job qualifications, indicated red card on-the-job training needs, and fire control training course needs. The system is designed to standardize qualification requirements service-wide. The system will also print the Forest Service individual red cards.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bernard J. Erickson
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 235-8666

System or Program I.D. Number
51001019

Software Title: **ANNUAL FIRE STATISTICS SYSTEM, 701031**

Short Title: FIRESTATS

Narrative Description: System to summarize fire statistics and prepare table outputs of number of fires, acres burned, and dollar damage by fire size class and statistical cause broken down by states, forests, and regions. The system contains program elements to edit/ update, cumulate monthly, sort/merge, and prepare the annual fire report.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bernard J. Erickson
USDA Forest Service
P.O. Box 2417
Washington, D.C. 20013
Telephone Number: FTS 8 235 8666

System or Program I.D. Number
51001020

Software Title: **DAILY CUMULATIVE FIRE REPORT, 1, 760601**

Short Title: DLYFIR

Narrative Description: Provides daily fire occurance report in cumulative form with mancaused fires and total acres burned printed. Also provides five year averages in cumulative form. Report run for year on region basis or on forest basis.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
John Steffans
USDA Forest Service
324-25th Street
Ogden, UT 84401
Telephone Number: FTS 586 6891   Comm 801 399 6891

System or Program I.D. Number
51001028

Software Title: **SLASH HAZARD PROGRAM**

Short Title: HAZARD

Narrative Description: This program obtains fire behavior estimates in slash order severe fire weather conditions using slash weights which must first be predicted using either an established stack or debris prediction computer program or the procedure described in Brown, James K., J.A. Kendall Snell, and David L. Bunnell. 1977 Handbook for predicting slash weight of western conifers. USDA For. Serv. res. pap. Int-37, Intermt. For. and Range Exp. Stn., Ogden, Utah 84401. By using the guides for interpreting the fire behavior numbers, along with some experienced judgment, the manager can come up with a HAZARD appraisal for the proposed project. This appraisal technique is especially well suited for describing the differences in the amount of debris and fire HAZARD between various stand treatment options.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jack V. Puckett
USDA Forest Service
P.O. Box 7669
Missoula, MT 59807
Telephone Number: FTS 585 3406

System or Program I.D. Number
51001029

Software Title: **DEBRIS PREDICTION MODEL**

Short Title: DEBMOD

Narrative Description: Provides predictions of tons per acre and cubic feet per acre of woody debris created by harvesting and thinning. This information can be used for assessing and managing debris problems, particularly fire hazards and slash treatment needs. The program uses Region 1, stage one data as input.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Jack V. Puckett
USDA Forest Service
P.O. Box 7669
Missoula MT 59807
Telephone Number: FTS 585 3406   Comm 406 329 3406

System or Program I.D. Number
51001030

Software Title: **FIRE DETECTION
PLANNING PROGRAMS**

Short Title: FIREPROGS

Narrative Description: The system includes programs that create fire files (FORSRT program) from individual fire reports (form 5100-29), select the desired years for the reports (FGATHER), and total and graph the number of fires by: time-of-day and day-of-week occurrence (timeday); Discoverer-class (DSCVR); and day-of-month and month-of-year occurrence (FIREMO). Fire files are stored on tape, by year.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
W. Speth
USDA Forest Service
633 W. Wisconsin Ave.
Milwaukee, WI 53203
Telephone Number: Comm (414) 291 3671   FTS 362 3671

System or Program I.D. Number
53001001

Software Title: **LAW ENFORCEMENT, 770930**

Short Title: ENFORCE

Narrative Description: A comprehensive system that summarizes information gathered from LAW ENFORCEMENT reports, and listings of LAW ENFORCEMENT data.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Robert Uhler
USDA Forest Service
1720 Peachtree Rd., N.W.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

6100 PERSONNEL MANAGEMENT

System or Program I.D. Number
61001001

Software Title: **RETIREMENT ANNUITY, 01, 741231**

Short Title: ANNUITY

Narrative Description: Program computes RETIREMENT ANNUITY of employee for all widow options. Annuities may be projected based on static sick leave and no step or grade increase. Cost of living bonus and retirement deduction are optional inputs. Salary used must be for 36 months. Deduction for under age 55 is also computed. User type instructions available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mrs. M.I. Stephens Or Butch Summer
USDA Forest Service
517 Gold Ave. SW
Albuquerque, NM 87102
Telephone Number: FTS 8-474-2411 Or 2591

System or Program I.D. Number
61001002

Software Title: **RETIREMENT, 01, 741126**

Short Title: RETIRE

Narrative Description: This program computes civil service RETIREMENT annuity estimates for either optional or discontinued service RETIREMENT for fulltime employees. The RETIREMENT program calculates the high three year average salary, total RETIREMENT service, gross annuity per year, reduction from gross annuity for non-payment of deposit to CSC RETIREMENT program and/or being under age 55, if applicable, the net basic annuity after reductions, the annuity if maximum survivor benefits to spouse are chosen, and the survivor annuity to the spouse. Also, the program will do a comparison estimate back to the last annuity cost-of-living increase (see FPM supplement 831-1, Section S 14-11, Paragraph C for a discussion of comparison estimates). The comparison estimate portion of the RETIREMENT program is optional and may be bypassed if not wanted. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
61001005

Software Title: **ANNUIT, 01, 730302**

Short Title: ANNUITY

Narrative Description: Computes the exact amount of your ANNUITY at the time your application for retirement is submitted. Computes your survivor ANNUITY and allows for the computation of a new ANNUITY based upon any cost-of-living increase at the time the increase occurs.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Tyree
USDA, Forest Service, Region 2
11177 West 8th Avenue
Lakewood, CO 80225
Telephone Number: FTS 8 234 3914

System or Program I.D. Number
61001006

Software Title: **SAFETY STATISTIC, 760908**

Short Title: SASTAT

Narrative Description: To provide a forest with safety statistics by: (1) quarter, (2) present year, (3) moving year, and (4) moving 3-year period. These statistics may be obtained by district or forest.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Denney
USDA Forest Service
P.O. Box 147 290 No. Main
Kalispell, Montana 59901
Telephone Number: FTS 8 585 3104

System or Program I.D. Number
61001007

Software Title: **RETIREMENT ANNUITIES, 1, 740701**

Short Title: RET

Narrative Description: Program RET calculates and prints a federal government employee's retirement annuity. For counseling purposes and with proper input, the program calculates and prints high-3 average salary, amount of actual service time (reduced by periods for which retirement deposits were withdrawn), sick-leave credit, reduction in annuity for planned retirement under age 55, dollar value of funds withdrawn or not paid-in plus compounded interest, disability retirement annuity, survivor annuity cost and amount, and cost of living adjustments to annuity.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Carrie L. Born
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6301

System or Program I.D. Number
61001012

Software Title: **SUMMER/SEASONAL TEMPORARY EMPLOYMENT SYSTEM**

Short Title: S/STEP, 771130

Narrative Description: Nationwide automated system for processing and rating of applications, establishment of applicant supply files, and selection of qualified applicants. Personnel management procedures in separate handbook.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Marilyn Chilton
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 1785

6300 PROCUREMENT MANAGEMENT

System or Program I.D. Number
63001001

Software Title: **BID INVITATIONS, 01, 750120**

Short Title: BID NOTICES

Narrative Description: This system builds a contractor file, prints labels and prints advance BID NOTICES with appropriate messages. Currently the system allows for 20 different types of contracting areas, i.e., roads, thinning, bridges. Program documentation is available to users.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Butch Summer
USDA Forest Service
517 Gold SW
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

6400 PROPERTY MANAGEMENT

System or Program I.D. Number
64001001

Software Title: **GOVERNMENT QUARTERS INVENTORY,**
01, 721101

Short Title: IGQ

Narrative Description: Rental rate system for government
dwellings, including an inventory of all quarters in the region
with calculation of individual rental rates based on regression
analysis (MDC) and rent survey every three years (FSM 6445).
LGQUD is an update of the inventory file. LGQINV performs the
rate calculations. LGQDATA is a formatted master file listing.
LGQFD is a frequency distribution by age and by class.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Jean Blas
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 415 556 4323

System or Program I.D. Number
64001002

Software Title: **NE PROPERTY INVENTORY, 01, 750714**

Short Title: NEPR

Narrative Description: Inventory system for all non expend-
able property with the ability to carry other expendable ac-
countable data on the data tape.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Gayle Cash
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6423

System or Program I.D. Number
64001003

Software Title: **PROPERTY INVENTORY SYSTEM,**
750731

Short Title: INV-PROG

Narrative Description: The PROPERTY INVENTORY SYS-
TEM manages records, each of which contains an item,
name, description, U.S. property number, dollar value, and
other pertinent information. Up to 3690 characters of informa-
tion may be collected for each item. The system consists of
a program to update the property file and a program to
generate a variety of reports using various sort options.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1110

Technical Information Contact:
Pat Ard, Kay Middlecamp
Forest Products Laboratory
P.O. Box 5130
Madison, WI 53705
Telephone Number: FTS 8 364 2428 Comm 608 257 2211

6500 FINANCE AND ACCOUNTING

System or Program I.D. Number
65001001

Software Title: **AIRCRAFT ACCOUNTING, 01, 740831**

Short Title: AIRACC

Narrative Description: Automates aircraft use billing procedure & provides information for WCF aircraft use & income report, smokejumper & helitack report and aircraft use report. AIRACC puts out: 1. accounting register for WCF aircraft and 2. summary by airplane for WCF aircraft. SCSUM from fiscal daily system is used to put out schedule summary. Subroutine aircon used for disk file handling.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Marilyn Chilton
USDA Forest Service
630 Sansome Street, Room 621
San Francisco, CA 94111
Telephone Number: Comm/FTS 415 556 4323

System or Program I.D. Number
65001002

Software Title: **ANNUITIES,
LOANS,
MORTGAGES,
01, 740905**

Short Title: ANNUIT

Narrative Description: This program performs the calculations necessary for determining both payment and withdrawal ANNUITIES. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
65001003

Software Title: **STATEMENT OF OBLIGATION,
ALL SERVICE, 01, 741220**

Short Title: AP275

Narrative Description: Takes data submitted by the regions and generates a STATEMENT OF OBLIGATION. Four reports can be made from this run. Each report requires a separate pass. There are two sorts associated with this program AS270A from the annual FY system, and AS275A, AS270A is part of the annual service wide B&F system. AS275A sorts the data prior to AP275. Refer to AP270 for further information about this program. This is a copy of it except for field sizes. This system is documented with the year end documentation.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001004

Software Title: **APPROPRIATION STATUS, 01, 740115**

Short Title: BF-51A

Narrative Description: Generates APPROPRIATION STATUS report. Program balances data to submitted totals. If in-balance, data is passed to 2nd half of program and printed. If out-of-balance, it prints region(s) out of balance and program terminates. Generates special reports on quarter and semi-annual basis. Generates a file that is passed to the federal geographic system. Program documentation, operations manual and a users guide is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001005

Software Title: **STATEMENT OF APPROPRIATION STATUS, 01, 740115**

Short Title: BF-225

Narrative Description: Generates a report of obligation. This is accomplished in 2 parts. Part 1 balances to totals submitted. If data balances, it is passed to part 2. If data does not balance, those regions that are out of balance will be printed and run terminated. Part 2 of run prints the report of obligation. Program documentation, operation manual and a users guide are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001006

Software Title: **ALLOCATES COST OF OVERHEAD, 01, 741031**

Short Title: BURAL

Narrative Description: This BASIC program uses matrix algebra to allocate costs of a series of overhead departments or accounts to a series of direct departments or products. A users guide is available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
65001007

Software Title: **CENTRAL VOUCHER PAYMENT CENTER, 01, 730201**

Short Title: CVPC

Narrative Description: Program takes data from CVPC and converts it to a format acceptable to the daily process of B&F. Within program, prior year appropriations are converted to current appropriations. An accounting register is made. Data is balanced to submitted totals. Balanced data is passed to daily process. Out of balance data is not passed. CVPC schedule number is changed to FS number. Program documentation and an operation manual are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001008

Software Title: **FEDERAL GEOGRAPHIC SYSTEM, 01, 741101**

Short Title: FEDG

Narrative Description: Produces a federal outlays report which is distributed to congressional offices, to state agencies and officials and to a number of other institutions, individuals, and groups. This report provides information for planning and budgeting officials at all governmental levels. The final output gives dollars spent within city and county boundaries by state by appropriation. Program documentation with operating instructions are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001009

Software Title: **MILLION DOLLAR REPORT, 01, 741001**

Short Title: MILREP

Narrative Description: Produces a report giving permanent full-time positions, other than permanent full-time positions, and total obligations to the nearest dollar by region, by project by appropriation. From these figures a service-wide man-year per million dollar obligation is calculated by the above order of region, project and appropriation. Program documentation is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001010

Software Title: **25 PERCENT FUND, 01, 741220**

Short Title: PERFUN

Narrative Description: Edits state, forest, county and township data input cards and produces reports of forest service net acreages and school funds paid by state, forest, county and by state congressional district. Program documentation with operating instructions is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001011

Software Title: **BUDGET SCHEDULE EDIT
& ZERO PROOF,
01, 741127**

Short Title: SCHED

Narrative Description: Edits budgets schedules A1, A0, C1, CA, CE for keypunch errors, bad data, unequal tab subtotals and totals and prints out data in table format listing any errors which are found. Any errors found may be corrected within the system by card input. A cross check between schedules A0 and A1 is also done to make sure they agree. Final action is to create 2 field data tapes containing the above error-free schedule data used by other budget and finance programs. Program documentation with operating instructions is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Alan D. Freas
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 4934

System or Program I.D. Number
65001012

Software Title: **TRUE ANNUAL INTEREST, 01, 740920**

Short Title: TRUINT

Narrative Description: Calculates the TRUE ANNUAL INTEREST rate on an installment loan. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
65001015

Software Title: ACCOUNTING SYSTEM (YEAR-END), 01, 750207

Short Title: YEAR-END

Narrative Description: YEAR-END processing of forest service fiscal accounting data. Program doc., system doc., operational doc. and a users guide are available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher V. Martin
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
65001023

Software Title: SALARY COMPUTATION PROGRAM, 01, 730101

Short Title: SALARY

Narrative Description: Calculates SALARY costs to government, including employee benefits. Summarizes costs by type of employment, within grade and promotion costs, employee benefit costs and payperiods. Input is employee, grade, benefits and number of payperiods.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
V E Findell, Region 4
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6841

System or Program I.D. Number
65001024

Software Title: UNIFORM WORK PLANNING & BUDGETING SALARY SCALES, 01, 730101

Short Title: UWPL

Narrative Description: Program generates three reports for work planning and budgeting: 1. table of payperiod dates; 2. schedule of annual salary rates by grade and 3. pay scale tables for all combinations of base pay and health insurance.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
V E Findell, Region 4
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6841

System or Program I.D. Number
65001026

Software Title: VEHICLE UTILIZATION

Short Title: CSSG·R1LIB.VEHUTLF, CSSG·R1LIB.VEHUTL

Narrative Description: Provides a method for computing the VEHICLE UTILIZATION report.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Denny
USDA Forest Service
P.O. Box 147 290 No. Main
Kalispell Mt. 59901
Telephone Number: FTS 8 585 3104

System or Program I.D. Number
65001045

Software Title: **51A LEDGER SYSTEM**

Short Title: 51A

Narrative Description: Edits and updates and adjusts regional and WO 51A files and produces regional and all-service 51A ledger reports.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Fletcher Martin
USDA Forest Service
P.O. Box 2417
Washington D.C. 20013
Telephone Number: FTS 447-2051

6600 SYSTEMS MANAGEMENT

System or Program I.D. Number
66001001

Software Title: **ADP MANAGEMENT INFORMATION SYSTEM, 01, 730701**

Short Title: ADP-MIS

Narrative Description: Two programs are for general purpose listings of the ADP/MIS file for internal forest service use only. Formatting is accomplished using header and parameter cards placed ahead of the data cards. The other program takes percentages given (use reported by forest service resource areas - FS manual designations) for each system spreading the use over various PPB building blocks as required by the system function report of the ADP/MIS report. Each program is independent of the other. A new program has been added to the system. This program developed by Ross Parry produces 7 reports which may readily be used by management. These reports do not involve the PPB building blocks. A user guide is available for the new program only.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Don Tasker
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 8 235 8670

System or Program I.D. Number
66001003

Software Title: **NON-EXPENDABLE INVENTORY,
01, 741129**

Short Title:

Narrative Description: Edits transaction cards on non-expendable items, produces a transaction error list and updates the master file with new, deleted or changed items. provides a physical inventory list, and a dead-file list.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Tyree
USDA, Forest Service, Region 2
11177 West 8th Avenue
Lakewood, CO 80225
Telephone Number: FTS 8 234 3914

System or Program I.D. Number
66001004

Software Title: **JOB MANAGEMENT
SYSTEM-ACCOUNTING,
01, 730101**

Short Title: JMSA

Narrative Description: Accounting and budgeting system to summarize income and costs, both paid and obligations, by type of expense and subunits.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
V E Findell
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6841

System or Program I.D. Number
66001011

Software Title: **FORT COLLINS UTILIZATION REPORT,
01, 751222**

Short Title: FCUTIL

Narrative Description: This program takes run-records from Fort Collins Computer Center for a specific region and extracts unit number, priority, CPU time, and actual-cost data and builds a file. From this file a utilization report is produced. Program documentation available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Butch Summer
USDA Forest Service
517 Gold Avenue, S.W.
Albuquerque, NM 87102
Telephone Number: FTS 474 2591 Comm 505 766 2591

System or Program I.D. Number
66001015

Software Title: **CELLULAR MAPPING SYSTEM, 760820**

Short Title: R10MAP

Narrative Description: R10MAP provides a means for assembling and displaying map representations of topographical data. An acreage summary of user-assigned land features is printed on the demand terminal if execution is done in demand mode. The actual display of topographical data is printed on a remote sight high-speed.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ronald L. Jaramillo
USDA Forest Service
P.O. Box 1628
Juneau, Alaska 99802
Telephone Number: Comm 907 586 7261 Thru FTS 399 0150

System or Program I.D. Number
66001016

Software Title: **CONVERSATIONAL INTERFACE FOR FMPS, 760820**

Short Title: DEMANDLP

Narrative Description: DEMANDLP is a conversational interface for the UNIVAC 1100 series functional mathematical programming system (FMPS) executing in linear programming mode. Provision is made for free-form or fixed-form input, and output is abbreviated for printing on 80-character demand terminals.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ronald L. Jaramillo
USDA Forest Service
P.O. Box 1628
Juneau, AK 99801
Telephone Number: Comm 907 586 7261 Thru FTS 399 0150

System or Program I.D. Number
66001019

Software Title: **LINE SPACER PROGRAM, 01, 771114**

Short Title: LNSPACE

Narrative Description: Takes any data file and creates spaces between the lines on the printed copy. It will allow comments, corrections or additions to the printed data copy.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dick Shaffer
USDA Forest Service, Computer Service Group
633 W. Wisconsin Ave.
Milwaukee, WI 53203
Telephone Number: FTS 8 362 3655   Comm 414 291 3655

System or Program I.D. Number
66001021

Software Title: **MANAGEMENT REPORTING SYSTEM, 01, 761126**

Short Title: MRS

Narrative Description: Program MRSREPORT provides a simple method of obtaining all monthly reports generated by FCCC utilization management report system for Region 5 ADP users. The program will prompt the user for types of reports desired. The options are management reports only, telecommunications report only, or both. Program TELECOM charges telecommunication cost to users. A billing of total time used and cost is shown for each account and site.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Susan E. Fisher
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 8557

7000 ENGINEERING

System or Program I.D. Number
70001001

Software Title: DIST & BRNG. FROM 2
POINTS TO 3RD POINT,
01, 740903

Short Title: APOINT

Narrative Description: Computes the distance from two known points to the point of intersection of the two lines originating from the two known points and running on two known bearings to the point of intersection. User instructions in FSH 6609.53. Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001002

Software Title: CUMULATIVE AVERAGE CURVE,
01, 741126

Short Title: CAUNI

Narrative Description: This basic program fits a least squares line under the CUMULATIVE AVERAGE CURVE theory to labor hours or cost for up to 250 units. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001003

Software Title: DIVISION OF CIRCLES, 01, 740915

Short Title: CIRCLE

Narrative Description: This program divides circles into any number of equal parts, giving the angles in decimal degrees, in degrees, minutes, and seconds and calculates horizontal and vertical distances from the center to a point on the circumference. This will do very large to very small circles. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001005

Software Title: COMPOSITE BEAM CONCRETE &
STEEL STRESSES, 01, 741031

Short Title: COMPBD

Narrative Description: This FORTRAN program is a composite beam check program. Presently it is limited to the case of a uniformly distributed load and shored construction. A previously saved data file must be used to describe the problem to be analyzed. User instructions in FSH 6609.53 Interactive Applications handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001006

Software Title: **CURVE FITTING, 01, 741126**

Short Title: CURFIT

Narrative Description: This program determines which of 6 curves best fits the supplied data and evaluates the function for other values of the independent variable. The program will accept up to 200 observations on 2 variables. The six curve types are: y=a+bx, y=a log e**bx, y=(ax)**b, y=a+(b/x), y=1/(a+bx), y=x/(a+bx). User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001007

Software Title: **DIVISION OF POLYNOMIALS, 01, 741126**

Short Title: DVALG

Narrative Description: This subroutine finds the quotient of two polynominals and the resulting remainder, if any. The dividend polynomial must not exceed a degree of 25 and the divisor polynomial must not exceed the dividend polynomial. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001008

Software Title: **FOURIER ANALYSIS PROGRAM, 01, 741025**

Short Title: FOURIA

Narrative Description: This program computes sine and cosin coefficients from 0-2 Pi range. Input is equally spaced data points, number of data points and number of harmonics. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001009

Software Title: **GAMMA FUNCTION, 01, 741126**

Short Title: GAMF

Narrative Description: This FORTRAN function evaluates the GAMMA FUNCTION. The calling sequence is y=gamf(x) where y=value of the independent variable. This is done by polynomial approximations. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001010

Software Title: **TABULATED FUNCTION DERIVATIVES, 01, 741126**

Short Title: HDRVEB

Narrative Description: This FORTRAN function computes the first, second, third, fourth or fifth derivative of a tabulated function using difference quotients. The independent variable must be equally spaced. Six-point numerical differentiation formulas are used. These formulas have an error term proportional to $h^{**}6^*f(6)$ where h is the increment of the independent variable and f(6) is the 6th derivative. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001011

Software Title: **HORIZONTAL ALIGNMENT, 01, 740912**

Short Title: HORALN

Narrative Description: This program computes the location of all stationing of circular curves in a route alignment and computes all circular curve data for each circular curve in the alignment. This program will consider a single curve up to any number of consecutive curves. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001012

Software Title: **MAXIMIZE LINEAR EQUATIONS, 01, 741025**

Short Title: LINPRO

Narrative Description: This program maximizes objective functions using the two-phase method. It automatically supplies slack, surplus and artificial variables as required for the solution. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001013

Software Title: **LINEAR REGRESSION, 01, 741126**

Short Title: LINREG

Narrative Description: This program produces an equation that best fits input points described by x and y coordinates. This fit is made in the least squares sense. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001014

Software Title: **LEAST SQUARE CURVE FIT
WITH WEIGHTS, 01, 741031**

Short Title: LSFITW

Narrative Description: This least square curve fit program fits data to the equation $y = a(0) + a(1) \cdot x(1) + a(2) \cdot x(2) + \ldots\ldots + a(m) \cdot x(m)$. You can enter data with or without weights. The degree of curve is entered during execution (max. degree #%10). It prints the coefficients and standard deviation for each coefficient, the standard deviation of the fitted curve, the y value, fitted y value and the deviation between the y and fitted y values. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001015

Software Title: **MATRIX INVERSION, 01, 741126**

Short Title: MTINV

Narrative Description: This subprogram inverts a matrix and/or solves linear systems by standard elimination. The determinant of the matrix must not be zero. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001016

Software Title: **MATRIX PRODUCT EVALUATION,
01, 741126**

Short Title: MTMPY

Narrative Description: This FORTRAN subroutine evaluates the product of two matrices. Each matrix has a maximum of 25 rows. User instructions in FSH 6609.53 Interactive Aplications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001017

Software Title: **NEWTON-RAPHSON ITERATION,
01, 741101**

Short Title: NEWRAP

Narrative Description: This program uses the NEWTON-RAPHSON ITERATION method to locate a root of a function whose derivatives are known. The initial approximation and accuracy are input by the user. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
70001019

Software Title: **ENGINEERING - BRIDGES, 01, 760130**

Short Title: BMCOL4

Narrative Description: This program is for beam or column analysis. It computes the deflection, slope moment, load and curvature for beams or columns. The input is from mass storage or tape file. The output is a listing of above computations. A research report is available to users.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Philip Keasey
USDA Forest Service
P O Box 3623
Portland, Ore 97208
Telephone Number: FTS 8 423 2230

System or Program I.D. Number
70001020

Software Title: **ENGINEERING -BRIDGES, 01, 760130**

Short Title: CANTI

Narrative Description: Basic language program for concrete t-girder bridges. Computes influence line ordinates, dead load moments, and dead load shears. Users guide available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
H. Oswald
USDA Forest Service
P O Box 3623
Portland, Ore 97208
Telephone Number: FTS 8-423-3151

System or Program I.D. Number
70001022

Software Title: **ENGINEERING, BRIDGES, 01, 760130**

Short Title: PRECHN

Narrative Description: Design of prestressed sections.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
H. Oswald
USDA Forest Service
P O Box 3623
Portland, Ore 97208
Telephone Number: FTS 8-423-3151

7000 ENGINEERING—Continued

System or Program I.D. Number
70001023

Software Title: **ENGINEERING, BRIDGES, 01, 760130**

Short Title: LOGSTR

Narrative Description: Basic language program for log stringer bridges. Produces inventory and overload ratings for deck planks, transverse members and log stringers. User guide available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
H. Oswald
USDA Forest Service
P O Box 3623
Portland, Ore 97208
Telephone Number: FTS 8-423-3151

System or Program I.D. Number
70001025

Software Title: **TRAVERSE COMPUTATIONS, 780329**

Short Title: CSSG·R1LIB.TRAV

Narrative Description: Free form input, closed or open traverse. Lined printer plot calcomp plot adjusted and unadjusted.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Joe Knudsen
USDA Forest Service
Federal Building
Missoula, MT 54801
Telephone Number: FTS 8 585 3823

7100 ENGINEERING OPERATIONS

System or Program I.D. Number
71001001

Software Title: **VEHICLES, 01, 720601**

Short Title: VEHICLES

Narrative Description: Provides output of all VEHICLES by equipment number showing days of use, days in shop for repairs and etc.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Myron T Tjarks
USDA, Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 8 234 3914

System or Program I.D. Number
71001002

Software Title: **DELINEATING
LANDSCAPES VIEW AREAS,
01, 721024**

Short Title: VIEWT

Narrative Description: Computes the area visible from an observers position. The radius of the view area can be varied to allow for analyzing different size areas from the same vantage point. Produces an overlay that shows the maximum area visible from an observation point.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Bill Donnelly
USDA Forest Service
Federal Building
Missoula, MT 59801
Telephone Number: FTS 8 585 3127

System or Program I.D. Number
71001003

Software Title: **PHOTOGRAMMETRY, 01, 750113**

Short Title: PHOTO

Narrative Description: This application consists of a system of programs for sterobridge adjustment, coordinate rotation, and conversion of geographic positions to state plane coordinates and the inverse. Field survey data and photogrammetric data are integrated and adjusted to available horizontal and vertical control. Adjusted positions are listed for mapping.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Bldg.
Missoula, MT 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001007

Software Title: **ENGINEERING ADMINISTRATION, 01, 750324**

Short Title: ADAM

Narrative Description: This system contains six programs which produce reports of personnel pay rates compared to usage, vehicle rates compared to usage, and programmed dollars and project funds. Input data is stored in 3 different data files. The output is printed at the time-share terminal. A users guide is available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter
USDA Forest Service
517 Gold S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2591

System or Program I.D. Number
71001010

Software Title: **CONSTRUCTION STAKED QUANTITIES, 01, 750811**

Short Title: XSEC

Narrative Description: See narrative on 71001011 XSECHAUL. No plot.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, MT 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001011

Software Title: **CONSTRUCTION OVERHAUL &**
MASS DIAGRAM, 01, 750811

Short Title: XSECHAUL

Narrative Description: This program computes (1) as staked excavation and/or haul quantities and (2) as build excavation and/or haul quantities. Plots the results on a mass diagram.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001012

Software Title: **TRAFFIC ANALYSIS SYSTEM,**
01, 750811

Short Title: TRAFFIC

Narrative Description: This system is designed to take TRAFFIC counter data from cards for individual counter sites and accumulate daily totals; make projections to furnish estimated TRAFFIC counts for periods no data is available; create a data bank on disk for future use; and print summaries showing daily, hourly, weekly, monthly and yearly totals.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001014

Software Title: **COMPUTATION OF STRESS RATIOS,**
01, 750811

Short Title: TRIAXIAL

Narrative Description: Computes and plots the deviator stress, stress ratio and pore pressure vs. strain.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001021

Software Title: **INDEPENDENT MODELS, 01, 710517**

Short Title: INMO

Narrative Description: Program INMO reduces related independent photogrammetric models into strips. The program is able to link into strips, models developed from related ground photographs, with or without ground control points. INMO uses tie points and ground control points to compute the projection center for each model. This reduces inaccuracies resulting from machine readings.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Verl Creager
USDA Forest Service
Federal Building,324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6948

System or Program I.D. Number
71001023

Software Title: **BLOCKA, 01, 721208**

Short Title: BLOC

Narrative Description: Program BLOCKA does polynomial adjustment of single strips and blocks of strips of photographs. With minimum ground control points, accuracy close to that of a linear transformation is obtained. Single strips are adjusted by geometric similarity; by height-for longitudinal curvature, torsion, and earth curvature; by transformation of planimetric coordinates. During block transformation, each strip is transformed and linked to other strips by common control points. The process used is iterative, with accuracy depending on number of iterations specified.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
  Verl Creager
  USDA Forest Service
  324-25th Street
  Ogden, Utah 84401
  Telephone Number: FTS 8 586 6948

System or Program I.D. Number
71001024

Software Title: **ANALYTICAL STRIP TRIANGULATION, 01, 710517**

Short Title: ANAL

Narrative Description: Program ANAL links strips of related photographs by analytical methods. The program uses the computer to do computations necessary for analytical aerial triangulation. The data for the program must be provided by use of mono or stereocompartor instruments.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
  Verl Creager
  USDA Forest Service
  Federal Building,324-25th Street
  Ogden, Utah 84401
  Telephone Number: FTS 8 586 6948

System or Program I.D. Number
71001025

Software Title: **SOLAR OBSERVATIONS, 01, 750811**

Short Title: SOLAR

Narrative Description: Provides the engineer with a calculated SOLAR bearing, using data obtained by observations of the sun. All calculations are based on the "altitude of the sun method" which is described in the K&E ephemeris.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
  Terry Marx
  USDA Forest Service
  Federal Building
  Missoula, Montana 59801
  Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001029

Software Title: **POLARIS OBSERVATIONS, 01, 750811**

Short Title: POLARIS

Narrative Description: Provides the engineer with a calculated POLARIS bearing, using data obtained by observations of the stars.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
  Terry Marx
  USDA Forest Service
  Federal Building
  Missoula, Montana 59801
  Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001030

Software Title: **THEODOLITE & SUBTENSE**
BAR TRAVERSE,
01, 750811

Short Title: SUBT

Narrative Description: Reduces subtense 1 theodolite field data.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001033

Software Title: **COMPUTER MAPPING FOR**
LAND USE PLANNING,
01, 750811

Short Title: COMLUP

Narrative Description: Does computer mapping utilizing input from digitized data and/or from a density slicer. System has capability of making composite overlay maps, including or excluding whatever areas the user desires. Provides acreage reports and plotter maps if so desired.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Terry Marx
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3261

System or Program I.D. Number
71001050

Software Title: **PROCESSING**
AREA TRAVERSE DATA 760908

Short Title: TRAV

Narrative Description: Format traverse data in one of three ways that is acceptable to the COGO system for processing.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ray Lakomski
USDA Forest Service
633 W. Wisconsin Ave.
Milwaukee, Wisconsin 53203
Telephone Number: FTS 8 362 3683

7200 COMMUNICATIONS AND ELECTRONICS

System or Program I.D. Number
72001001

Software Title: **INTERMODULATION PRODUCTS,**
771115

Short Title: INTMOD

Narrative Description: Calculates intermodulation between
up to 100 transmit and 10 receive frequencies.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Cal Van Ornham
USDA Forest Service
1720 Peachtree Rd., N.W.
Atlanta, GA 30309
Telephone Number: FTS 8 257 7593

7300 BUILDINGS AND OTHER STRUCTURES

System or Program I.D. Number
73001001

Software Title: **BEAM DESIGN, 01, 740903**

Short Title: BEMDES

Narrative Description: This basic program evaluates and
recommends the correct steel beam to be used in a number
of load and support applications. Options for loading include
uniformly distributed load, concentrated midpoint load, and two
symmetric concentrated loads. Options for support include:
Simple supports at both ends, simple support at one end-other
end fixed, both ends fixed, one end fixed, other end unsup-
ported (cantilever). User instructions in FSH 6609.53 Interactive
Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
73001002

Software Title: **COMPUTES AVERAGE ANNUAL RATES,**
01, 741122

Short Title: FINSL

Narrative Description: This FORTRAN program COM-
PUTES AVERAGE ANNUAL RATES of damages, damages
less two (2) percent deductible and premium risk. User in-
structions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
74001001

Software Title: **PIPE VOLUME CALCULATION,
01, 740904**

Short Title: PIPEVO

Narrative Description: This program calculates the total internal volume of a piping system using steel and/or copper tubing. Volumes shown in cubic feet and gallons. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
74001002

Software Title: **WATER POLLUTION
ABATEMENT PROJECT INVENTORY,
760816**

Short Title: WAPAPI

Narrative Description: Series of programs to inventory, update, & summarize water pollution projects. These are projects qualifying under PL 92500 & Exec. Order 115079. More detailed info. is contained in the publication "PL 92-500 point source water pollution abatement program guidelines for line & staff officers, dated 2-75.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Greenwald
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235-8024

System or Program I.D. Number
74001003

Software Title: **POTABLE WATER SUPPLY INVENTORY,
760816**

Short Title: PWSI

Narrative Description: Creates a data base of potable water sources. It also provides the listing, updating, and summary info. of this data base. The data base is used as input to the BMS programs. In addition, there is a short retrieval program. gram.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Greenwald
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235-8024

System or Program I.D. Number
74001004

Software Title: **BACTERIOLOGICAL
MONITORING SYSTEM,
760816**

Short Title: BMS

Narrative Description: Monitors the results of water samples. Provides a history listing of the previous 68 tests and prints out diagnostic messages when tests fail prescribed standards. standards.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Greenwald
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: 235-8024 (FTS)

System or Program I.D. Number
74001005

Software Title: **EXECUTE PWSI AND BMP PROGRAMS**

Short Title: R5˙FS.BACMASTER,
R5˙FS,BACEDIT, R5˙FS,BACTEST

Narrative Description: These programs provide field users with a simple method of executing the potable water supply inventory and the bacteriological monitoring program in either batch or demand mode. Program BACMASTER includes options to list the user PWSI data, sorting and editing the input data, and printing a formatted listing of the input PWSI data. Program BACEDIT will edit bacteriological monitoring program data and print an error listing. Program BACTEST uses corrected data from BACEDIT program to create a history record of the data and lists out information derived from the data. All history files are automatically saved for 6 months from the time the program is run.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Cliff Reichard
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 7441

7500 WATER STORAGE AND TRANSMISSION

System or Program I.D. Number
75001001

Software Title: **DAM INVENTORY MANAGEMENT,**
01, 701001

Short Title: DAMM

Narrative Description: An automated inventory of dams that are administered by the Forest Service or affected by its programs. Programs in the system are: dam inventory master update, dam inventory list, dam report writer and a forest table look up written in compass.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Cecil Webb
USDA Forest Service
324 - 25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6836

System or Program I.D. Number
75001002

Software Title: **SHADOW LENGTH PROGRAM,** 760908

Short Title: CSSG˙R1LIB.SHADOW

Narrative Description: Calculates shadow lengths of object for varying aspects, latitudes, and seasons of the year.

Mode Software Developed for: Operational

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Joe Knudsen
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3823

7700 TRANSPORTATION SYSTEMS

System or Program I.D. Number
77001001

Software Title: **LIVE AND STANDING SKYLINE,
01, 721101**

Short Title: SKYLINE

Narrative Description: Locates a selected number of critical points and determines a line length necessary to clear these points with a load that can be supported at midspan with design tension in the SKYLINE cable. Program may be entered from a slow speed terminal.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jerry R Leonard
USDA Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 8 234 4892

System or Program I.D. Number
77001004

Software Title: **SKI LIFT ANALYSIS, 01, 720307**

Short Title: SKIBAL

Narrative Description: Provides analytical results of various loading conditions such as how the tower reacts to variations in chair loadings and chair movement along the system.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jerry R Leonard
USDA, Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 8 234 4892

System or Program I.D. Number
77001007

Software Title: **TIMBER TRANSPORT MODEL,
01, 750131**

Short Title: TIMBRI

Narrative Description: The TIMBER TRANSPORT MODEL is a computer program for studying the operational and economic efficiency of transport systems for timber haul. The model can be used to study the transport implications of alternative timber harvest plans.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William E Brownfield, WO Engineering (tag)
USDA Forest Service
P. O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235 1258

System or Program I.D. Number
77001008

Software Title: **TRAFFIC VOLUME ANALYSIS SYSTEM,
01, 750124**

Short Title:

Narrative Description: Checks, reduces and stores traffic count data in the computer. Prints out graphic summaries of traffic count data. Performs statistical analyses of traffic count data-annual growth correlation among sites, confidence limits of periodic counts, point estimate adt. and hourly traffic volumes. Reference: Traffic Surveillance Handbook.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William E Brownfield, WO Engineering (tag)
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235 1258

System or Program I.D. Number
77001012

Software Title: **RECREATIONAL TRAVEL MACRO-MODEL, 01, 750124**

Short Title: MACMOD

Narrative Description: The RECREATIONAL TRAVEL MACRO-MODEL is used to analyze the travel of recreationists from home to accessible national forests. Using interview survey data, the model is fitted to observed characteristics of recreational travel and then used to estimate future forest recreational use subject to trends in population patterns and changes in the regional highway system.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William E Brownfield, WO Engineering (tag)
USDA Forest Service
P. O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235 1258

System or Program I.D. Number
77001014

Software Title: **RECREATION TRAVEL MICRO-MODEL, 01, 750124**

Short Title: MICMOD-MICCAL

Narrative Description: The recreational travel-models provide several techniques for forecasting future recreational traffic volumes on the forest transportation network. These forecasts are sensitive both to the structure of the transportation system and the pattern of recreational attractors present in the forest. The purpose of this analysis is both to estimate what traffic is likely to occur given present trends and, more importantly, to explore how more desirable future use patterns might be encouraged by systematic control of forest investment and operating policies.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William E Brownfield, WO Engineering (tag)
USDA Forest Service
P. O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235 1258

System or Program I.D. Number
77001015

Software Title: **CLOSE LAT & DEPT TRAV BETWEEN 2 POINTS, 01, 740904**

Short Title: CLOSUR

Narrative Description: This basic program closes a latitude and departure traverse between any two known points. This program establishes the length and bearing of the line between any two known points. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
77001016

Software Title: **SPIRAL CURVE STATIONING, 01, 740912**

Short Title: SPIRAL

Narrative Description: This program computes the location of all stationing of SPIRAL curves in a route alignment and computes all SPIRAL curve data for each SPIRAL curve in the alignment. This program will consider a single curve up to any number of consecutive curves. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
77001017

Software Title: **SURVEY TRAVERSE ANALYSIS,**
01, 741031

Short Title: SURVEY

Narrative Description: Solves normal analysis problems associated with SURVEY traverses. It will accept up to 38 courses per traverse. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
77001018

Software Title: **PLANAR PINNED TRUSS ANALYSIS,**
01, 741022

Short Title: TRUSS1

Narrative Description: Uses the stiffness matrix method to compute joint translations, member axial loads, and structural reactions for planar pinned trusses. The truss may have up to 40 joints and 80 members. A given truss may be analyzed for any number of loading cases. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
77001019

Software Title: **ROAD DESIGN SYSTEM, V2R9, 750102**

Short Title: RDS

Narrative Description: RDS is a system which calculates earthwork volumes and produces plotter federal aid sheets and other graphics for engineering purposes based upon various constraints of road geometry as supplied by the designer. All programs have a common data base and can be run as desired to obtain specific types of analysis.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42,
CDC 3100, CDC 7600

Technical Information Contact:
Mack Litten Or Harvey Krantz
USDA, Forest Service, EDSG
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 5274

System or Program I.D. Number
77001025

Software Title: **TIMBER SALE ACTION PLAN,**
01, 740701

Short Title: TIMSALE

Narrative Description: Edits input and updates data related to timber sales and road activity. The system produces a timber sale data and activity schedule showing system road development and maintenance and road related activities. The program also produces a TIMBER SALE ACTION PLAN which shows timber related activities by total cost for district, forest, state and region.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
James D. Hogan
USDA Forest Service, Region 2
1117 West 8th Avenue
Lakewood, CO 80225
Telephone Number: FTS 8 234 4892

System or Program I.D. Number
77001026

Software Title: **ESTIMATING GUIDE COMPUTER PROGRAM, 02, 770228**

Short Title: EGCP

Narrative Description: Maintains files of bid experience, analzes bids and produces tabulations. Also does accounting of partial payments.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., NW, Suite 215
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
77001027

Software Title: **TRANSPORTATION ROAD INVENTORY, 01, 750814**

Short Title: ROADS

Narrative Description: Region 9 is presently using this program on an IBM 1401 W/8K core storage advanced programming high-low-equal compare, sense switches, 132 printer and four magnetic tapes. R905A - update road inventory; R9070 - create road name tape; R9080 - road reference list; R9090 reproduce road inventory tape; R9091 - list road inventory record; R9220 - edit update road inventory record; R9230 - summarize road inventory by forest; R9240 - summarize road inventory by state and region; and IBM sort 7 - stock tape sorting program. TTPS may be replacing this R9260 - convert tape to cards.

Mode Software Developed for: Batch

Computer Manufacturer and Model: IBM 1401

Technical Information Contact:
M Boduch
USDA Forest Service
633 W. Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8 362 3208

System or Program I.D. Number
77001028

Software Title: **CALCOMP GRIDS PLOTS, 01, 750814**

Short Title: GRIDS

Narrative Description: Creates a calcomp plot of any size or shape of grid (square or rectangular) according to user-specified instructions. Because the scale factor on various calcomps differ, the accuracy of the plot is dependent upon proper calcomp scaling adjustments.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
N L Mason
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8 362 1373

System or Program I.D. Number
77001029

Software Title: **BRIDGES, 01, 750814**

Short Title: BRIDGE - FILE

Narrative Description: This system consists of 10 programs to assist the bridge designated (numbered EBHC 01-03, 07, 13, 14, 17-20): 1) EBHC01 wooden bridge superstructure analysis 479; 2) EBHC02-log beam analysis 114; 3) EBHC03-timber beam analysis 113; 4) EBHC07-backwall on wingwall analysis 373; 5) EBHC13-theorem of 3 moments (uniform loads) 41; 6) EBHC 14-theorem of 3 moments (concentrated loads 69; 7) EBHC17-glued laminated deck design 78; 8) EBHC 18-channel hydraulics-level energy methods 89; 9) EBHC 19-channel hydraulics-mannings 58; and 10) EBHC20-maximum moment simple beam 161. All are interactive. EBHC 13, 14 and 20 are FORTRAN V and the rest are basic.
basic.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
M Boduch
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8 362 3208

System or Program I.D. Number
77001030

Software Title: **DAMS, 01, 750814**

Short Title: DAM-FILE

Narrative Description: This system consists of 9 programs to assist the DAMS designer (EEKJ 00 to 09, and SHIP 01): EEJK 00 - freg. & mag. of flood (Hazen); EEJK 02 - whistle tube spillway (specific); EEJK 03 - C.M.P. whistle tube emergency spillway; EEJK 04 - C.M.P. drop inlet; EEJK 05 - E.M.P. drop inlet and emergency spillway; EEJK 06 - spillway demand curve; EEJK 07 - pipe friction and energy; EEJK 08 - rect. and trap. friction & energy and EEJK 09 - inflow hydrograph. All are basic long.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
J Klatt Or M Boduch
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8 362-3365 (Klatt) Or 8 362-3208 (Boduch)

System or Program I.D. Number
77001031

Software Title: **FRONT END TO ANY OF THE CULVERT ROUTINE, 01, 750814**

Short Title: CULVERTS

Narrative Description: This is a series of elements for calculating all types of CULVERTS (cox culvert, pipe arch CULVERTS, and circular CULVERTS). This program also has a prompted input section.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
N Mason
USDA Forest Service
633 West Wisconsin Avenue
Milwaukee, WI 53203
Telephone Number: FTS 8 362 1373

System or Program I.D. Number
77001033

Software Title: **GIRDER, 01, 700424**

Short Title: GIRD

Narrative Description: Program is an aid in analysis or design of prestressed girders. The program calculates stresses and compares with allowable limits. The design portion of the program adjusts GIRDER components and re-analyzes adjusted design until design criteria are met.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Steve Bunnel
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6581

System or Program I.D. Number
77001034

Software Title: **FRAME, 01, 710301**

Short Title: FRAM

Narrative Description: Program computes bridge FRAME properties from a dimensional description of a proposed or existing bridge. Fixed end moments can be entered directly or computed from a description of applied loads. Sidesway of FRAME is not assumed by program and must be computed by user.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Steve Bunnel
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6581

System or Program I.D. Number
7700 1035

Software Title: **WATER SURFACE PROFILE, 01, 750522**

Short Title: SURF

Narrative Description: Determines WATER SURFACE PRO-
FILE in rectangular and trapezoidal shaped channels. Will
compute the conjugate depth in stilling basins. Will also com-
pute the velocity, the water depth and the energy grade
elevation at each section of input.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Roger White
USDA Forest Service
11177 West 8th Avenue
Lakewood, CO 80225
Telephone Number: FTS 8 234 4831

System or Program I.D. Number
7700 1036

Software Title: **ROAD MAINTENANCE, 780329**

Short Title: CSSG·R1LIB.ROADM1

Narrative Description: ROAD MAINTENANCE costs and ac-
complishments are totaled by road number, maintenance
level, and activity.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Demmey
USDA Forest Service
P.O. Box 147 290 No. Main
Kalispell, Montana 59901
Telephone Number: FTS 8 585 3104

System or Program I.D. Number
7700 1037

Software Title: **PROFILE PLOT, 780329**

Short Title: CSSG·R1LIB.PLOTX

Narrative Description: This program reads free form input
from a file and plots a profile.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Joe Knudsen
USDA Forest Service
Federal Building
Missoula, Montana 59801
Telephone Number: FTS 8 585 3823

System or Program I.D. Number
7700 1038

Software Title: **MINIMUM COST ANALYSIS, 780329**

Short Title: CSSG·R1LIB.MINCST

Narrative Description: MINCST is a transportation planning net-
work analysis program to determine minimum transportation
cost, minimum travel time or minimum distance for travel be-
tween places in a transport network.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bill Schnelle
USDA Forest Service
Fed Bldg.
Missoula, Montana 59801
Telephone Number: Comm 406-329-3398 FTS 585-3398

System or Program I.D. Number
77001040

Software Title: CIRCULAR PIPE CULVERT ANALYSIS, 760315

Short Title: PIPMN

Narrative Description: This is an FHWA program which analyzes circular culverts with either conventional or improved inlets.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dick Jones
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, Ga. 30309
Telephone Number: FTS 257 3367 Comm (404) 881 3367

System or Program I.D. Number
77001041

Software Title: BOX PIPE CULVERT ANALYSIS, 760315

Short Title: BOXMN

Narrative Description: This is an FHWA program which analyzes box culverts with either conventional or improved inlets.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dick Jones
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, Ga. 30309
Telephone Number: FTS 257 3367 Comm (404) 881 3367

System or Program I.D. Number
77001042

Software Title: CULVERT OUTLET PROTECTION DESIGN, 750731

Short Title: COP

Narrative Description: This program is capable of estimating the scour extent and culvert outlets and designing both rigid and rock riprap stilling basins.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dick Jones
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, Ga. 30309
Telephone Number: FTS 257 3367 Comm (404) 881 3367

System or Program I.D. Number
77001044

Software Title: BRIDGE GEOMETRICS, 760908

Short Title: BG

Narrative Description: Perform calculations related to the bridge geometry. Calculates elevations on bridge deck based on super-elevation. Calculates stationing around the bridge using curve formula.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Greenwald
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235-8024

System or Program I.D. Number
77001045

Software Title: **BRIDGE RATING AND ANALYSIS STRUCTURAL SYSTEM, 760816**

Short Title: BRASS

Narrative Description: Performs rating analysis and design calculations for several types of bridges. It will not handle trusses, arches, cantilevered or prestressed bridges. It will do all others plus deck and some column analysis.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
John Greenwald & Larry Bruesch
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235-8024 And 235-9844

System or Program I.D. Number
77001047

Software Title: **INTERACTIVE ROAD DESIGN SYSTEM, 760816**

Short Title: IRDS

Narrative Description: Conversational program to allow users to interact with the computer to design roads with a minimum amount of ADP knowledge. It generates runstreams, sends print files to high speed printer updates files and edits data prior to going into RDS. It is re-entrant.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mack Litten Or Harvey Krantz
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 323-5274 Comm 303-221-1910

System or Program I.D. Number
77001048

Software Title: **TRAILS INVENTORY REPORTING SYSTEM, 770223**

Short Title:

Narrative Description: This system maintains a master file of trails data. It provides for updating master data and for generating detailed and summarized reports from this data. This master file is a revision of the 7700-9T forms to implement recreation emphasis for trails.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter, Computer Systems
USDA Forest Service, R3
517 Gold Ave. S.W.
Albuquerque, NM 87102
Telephone Number: FTS 8 474 2592 Comm 505 766 2592

System or Program I.D. Number
77001051

Software Title: **TRAVELWAYS INVENTORY SYSTEM, 771206**

Short Title: TRV03

Narrative Description: This computer system is maintained at FCCC. The initial input data to this system was coded by each forest on the transportation inventory form 7709-R. Updates to the system will be coded on the reports generated by the system. The output of the system will be two reports for each forest. A report by road number for the entire forest and a report by road number within each ranger district. A separate master file will be maintained for each forest. This was requested by engineering to reduce processing cost due to the large volume of data to be collected.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter, Computer Systems
USDA Forest Service R3
517 Gold Ave SW
Albuquerque, NM 87102
Telephone Number: Comm 505 766 2591   FTS 474 2591

System or Program I.D. Number
77001052

Software Title: **EQUIPMENT NONUSE REPORT, 770607**

Short Title: ENUR03

Narrative Description: This is an interactive program which will generate a graph showing vehicle use and nonuse for a particular vehicle pool. Totals are printed showing available use and nonuse vehicle days. A usage percentage is also calculated for each pool. This program was designed to be run at the forest or district level.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tom Porter Computer Systems
USDA Forest Service R3
517 Gold Ave SW
Albuquerque, NM 87102
Telephone Number: Comm 505 766 2591 FTS 474 2592

8200 LAND USE PLANNING

System or Program I.D. Number
82001001

Software Title: **AREA ANALYSIS, 01, 740621**

Short Title: AREA

Narrative Description: This system generates seen AREA and/or slope aspect maps from coded elevation data.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William Smith III
USDA Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 8 234 3914

System or Program I.D. Number
82001002

Software Title: **LAND INVENTORY MAPPING, 01, 740904**

Short Title: LIM (R2MAP)

Narrative Description: This system generates a topographic map of an area from inventory data coded on the land use analysis source document. The output listing can be used in a variety of ways to aid planning and analysis of geographical areas.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
William Smith III
USDA Forest Service, Region 2
11177 West 8th Avenue
Lakewood, Colo 80225
Telephone Number: FTS 8 234 3914

System or Program I.D. Number
82001003

Software Title: **MASTER JOB LIST, 01, 750101**

Short Title: MASTER JOB

Narrative Description: Used in unit planning to list the jobs to be done in a ten year period for a specific unit. Designed to run on a demand terminal. Updates are done with the editor.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ray Hall
USDA Forest Service
1720 Peachtree Rd.
Atlanta, GA 30309
Telephone Number: FTS 8 257 4676

System or Program I.D. Number
82001004

Software Title: **SYMAP, 01, 681001**

Short Title: SYMAP

Narrative Description: SYMAP is a digital computer program designed to produce synagraphic maps which graphically depict spatially disposed quantitative and qualitative information. Northwestern University - User Guide.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Charles W. Hensley
USDA Forest Service
1720 Peachtree Rd
Atlanta, GA 30309
Telephone Number: FTS 285 2242

System or Program I.D. Number
82001005

Software Title: **BUILDS A DATA FILE FOR GRID,
01, 750213**

Short Title: DBMANG

Narrative Description: DBMANG is a FORTRAN program that builds and maintains grid-style land-use classification data bases. To facilatate use by non-programmers, the system was developed with a free-form verbal command language and easy to follow user instructions. Built within the system is an editor which edits and maintains the generated data files. The system will also generate new variables in the data base.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Ray Hall
USDA Forest Service
1720 Peachtree Rd
Atlanta, GA 30309
Telephone Number: FTS 8 257 4676

System or Program I.D. Number
82001006

Software Title: **LOCAL ECON BENEFIT ANAL
FOR UNIT PLAN, 01, 750328**

Short Title: BENEFIT

Narrative Description: Performs economic base analysis on multi-county area and estimates the contributions to the local economy from forest products produced by alternate management plans. Based on program by Convery, Duke University.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42, IBM 360

Technical Information Contact:
Sylvia Webb
USDA Forest Service
1720 Peachtree Rd, NW
Atlanta, GA 30309
Telephone Number: FTS 8 257 2242

System or Program I.D. Number
82001007

Software Title: GRID, 01, 750101

Short Title: GRID

Narrative Description: A modification of Harvard GRID. Provides a highly efficient means for overlaying and graphically displaying information collected on the basis of a rectangular coordinate GRID.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Charles Hensley
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, GA 30309
Telephone Number: FTS 8 257 2242

System or Program I.D. Number
82001011

Software Title: GOAL PROGRAMMING, 751201

Short Title: GOAL

Narrative Description: A multi-objective optimization program similar to linear programming. It uses a revised form of revised simplex for the solution and is capable of handling moderate sized problems. Max. size is now set at 500 rows by 1000 columns.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Tim Sale
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1447

System or Program I.D. Number
82001014

Software Title: EMPLOYEE COST TO GOVERNMENT,
01, 771114

Short Title: AEMPCST

Narrative Description: This program generates a listing of the 18 GS civil service grades and the 10 step increases for each grade. Each grade/step line group shows the cost to the government for different combinations of employees. The 180 grade/step groups are listed at 3 to a page or uses 60 printed pages of computer paper. Program is updated when pay scale changes or health benefit costs increase.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dick Shaffer
USDA, Forest Service, Computer Service Group
633 W. Wisconsin Ave.
Milwaukee, WI 53203
Telephone Number: FTS 362-3655   Comm 414-291-3655

8300 SYSTEMATIC ANALYSIS

System or Program I.D. Number
83001001

Software Title: SIMULATED NATIONAL FOREST,
730427

Short Title: SNAFOR

Narrative Description: A computerized simulation designed for use in conjunction with a natural resource game (SNAFORUP&DP) which depicts and demonstrates a multifunctional planning process. The simulation is designed as an information processor that calculates and describes changes in resource characteristics and interrelationships resulting from decisions made by participants.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42, IBM 370

Technical Information Contact:
Thompson, Ron   Hokans, Rick
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: Comm/FTS 202-447-5663

9888 GENERAL PURPOSE

System or Program I.D. Number
98881001

Software Title: GENERAL PURPOSE LABEL SYSTEM,
01, 740304

Short Title: LABELS PNS-001

Narrative Description: Systems maintains a master file containing addresses. Distribution of publications is maintained for each addressee record. Distribution information may be selected and printed as a printed report or on gummed labels for mailing. Selects labels by groups, producing labels for distribution to certain points in the Forest Service. User guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Roy Gobel
USDA Forest Service
P.O. Box 2417
Washington , DC 20013
Telephone Number: FTS 8 447 2051

System or Program I.D. Number
98881003

Software Title: SELF GENERATING MASTER,
01, 750101

Short Title: SELGEM

Narrative Description: The SELGEM system is a collection of general purpose programs developed for information management and retrieval. They are suited to the processing of descriptive information expressed in English or clear text where the data is variable in length and number of fields. The functions performed by the various programs include the following - updating, listing, report generation, retrieval by keywords, tabulation, resequencing, editing, selection, merge, cross reference/index lists and data string manipulation. A users guide is available to users

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42,
CDC 3100

Technical Information Contact:
Lyle Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881006

Software Title: **REGRESSION ANALYSIS, 01, 670501**

Short Title: REX

Narrative Description: REX is an expandable computerized system that provides data needed in regression or covariance analysis of as many as 50 variables, 8 of which may be independent. Alternatively, it can screen variously generated combinations of independent variables to find the regression with the smallest mean-square-residual, which will be fitted. If desired users can easily program additional processing. Ref. US Forest Service Research Paper PSW-44.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dan Schroeder
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1401

System or Program I.D. Number
98881007

Software Title: **ONE OR TWO WAY ANALYSIS OF VARIANCE, 01, 741212**

Short Title: ANOVA

Narrative Description: This FORTRAN program performs either a one-way or two way analysis of variance. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881008

Software Title: **ANALYSIS OF VARIANCE TWO-WAY, 01, 750108**

Short Title: ANOVA1

Narrative Description: This basic program computes the analysis of variance for a two-way classification. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881009

Software Title: **THREE-WAY ANALYSIS OF VARIANCE, 01, 741223**

Short Title: ANVA3

Narrative Description: Program performs a THREE-WAY ANALYSIS OF VARIANCE. Data can be entered via terminal keyboard or data file. The option of data printout is given as the program executes. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881010

Software Title: **ARCSIN IN RADIANS, 01, 741113**

Short Title: ARSIN

Narrative Description: This FORTRAN program Computes the ARCSIN IN RADIANS correct to 9 places Range is $0 \leq (\times) \leq 1$. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881011

Software Title: **ARCTANGENT IN RADIANS OF Y/X, 01, 741113**

Short Title: ARCTAN

Narrative Description: This FORTRAN subroutine determines the angle in radians on the interval whose tangent is y/x. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881013

Software Title: **BESSEL FUNCTION (GAMF, CLPLY), 01, 741122**

Short Title: BESL

Narrative Description: This FORTRAN subroutine computes the Bessel function j, of the first kind, for a real order and real argument. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881014

Software Title: **BESSEL FUNCTIONS, 01, 740915**

Short Title: BESSEL

Narrative Description: This program determines the value of the BESSEL function of the first kind with order "p" and argument "z" here "z" is not complex. Maximum values for p and z are 20 and 20, beyond this value the results lose significance. Convergence is continually checked, but the maximum number of iterations allowed is 50. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881015

Software Title: **BINOMIAL COEFFICIENTS, 01, 741113**

Short Title: BICOF

Narrative Description: This FORTRAN subroutine generates a set of BINOMIAL COEFFICIENTS. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881016

Software Title: **POPULATION PROPORTION, 01, 750107**

Short Title: BICONF

Narrative Description: This basic program determines the confidence limits for a POPULATION PROPORTION based on the exact binomial distribution. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881017

Software Title: **BINOMIAL PROBABILITIES, 01, 741205**

Short Title: BINDIS

Narrative Description: BINDIS computes the binomial distribution function for problems of this type: in a series of n independent trials, each with probability of success p, what is the probability that there will be exactly x successes? User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881018

Software Title: **TEST OF BINOMIAL PROPORTIONS, 01, 750109**

Short Title: BITEST

Narrative Description: Performs a statistical test of a binomial proportion. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881019

Software Title: **TELETYPE AS CALCULATOR,**
01, 741125

Short Title: CALC

Narrative Description: CALC is a program that allows calculations to be done rapidly using the teletype or terminal as a sophisticated calculator. Requests such as clear accumulator, load accumulator, add, subtract, multiply divide, raise to a power, and apply specialized functions to an accumulator permits processing values and equations of users designs. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
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  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881020

Software Title: **FITS WEIGHTED LEAST SQ LINE**
UNDER CUMAVG CURVE,
01, 741209

Short Title: CALOT

Narrative Description: This program fits a weighted least squares line under the cumulative average curve theory to average labor hour or cost for up to 200 lots. Lines 0-699 are available for use as data statements. Enter first the number of lots and then the first unit, last unit, and average unit hours or cost for each lot in sequence. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881021

Software Title: **CROUT DETERMINANTS, 01, 740920**

Short Title: CDETER

Narrative Description: This program evaluates determinants with real or complex elements using the Croute method. A description of the Croute method for complex determinant evaluation is to be found in "Introduction to Numerical Analysis" by F.B. Hildebrand, McGraw-Hill, 1956. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881022

Software Title: **EVALUATION OF POLYNOMIALS,**
01, 741113

Short Title: CLPLY

Narrative Description: This FORTRAN function evaluates a polynomial defined as the sum of powers of a single real variable. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881023

Software Title: **POPULATION PROPORTION (NORMAL), 01, 741217**

Short Title: CONBIN

Narrative Description: This basic program determines confidence limits for a population proportion based on the normal curve approximation. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881024

Software Title: **DIFFERENCE OF MEANS IN EQUAL VARIANCE, 01, 741217**

Short Title: CONDIF

Narrative Description: This basic program computes confidence limits for the difference between two population means, based on data supplied for two samples, one from each population. User instructions in FSH 6609.53 Inteactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881025

Software Title: **SAMPLE MEAN, 01, 741217**

Short Title: CONLIM

Narrative Description: This basic program computes confidence limits for an unknown population mean based on random sample data. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881026

Software Title: **COMPUTES A CORRELATION COEFFICIENT, 01, 741217**

Short Title: CORREL

Narrative Description: This basic program COMPUTES A CORRELATION COEFFICIENT for two sets of data having equal number of elements. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881027

Software Title: **LEAST SQUARES ESTIMATE**
FINITE FOURIER SERIES,
01, 741212

Short Title: FORIR

Narrative Description: This FORTRAN program determines the least-squares estimate of the finite fourier series model. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881028

Software Title: **GEOMETRIC MEAN &**
STANDARD DEVIATION,
01, 740917

Short Title: GEOMEN

Narrative Description: This program computes the geometric mean and geometric standard deviation for a geometrically normal series of data where n is the number of data elements and d(j) is the value of the jth data element. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881029

Software Title: **MEAN,**
VARIANCE,
STANDARD DEVIATION,
01, 741217

Short Title: MANDSD

Narrative Description: This basic program calculates the mean, variance, and standard deviation for each of several sets of individual values or frequency distributions. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881030

Software Title: **COMPUTES MOVING AVERAGES**
FOR UP TO 600 OBS. 01,
741217

Short Title: MOAVE

Narrative Description: This basic program computes moving averages for up to 600 observations and any size of moving average. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881031

Software Title: **MULTIPLE LINEAR REGRESSION,
01, 741213**

Short Title: **MREG1**

Narrative Description: This program fits the model y-my = sum(xi-mxi)bi, where i varies from 1 to m, to a series of discrete observations xi. here, mxi is the mean of independent variable xi and my is the mean of the observed data point. x1, x2, x3, ..., xm represent the mean value of the independent variables, and y represents the mean value of the observed data points. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881032

Software Title: **MULTIPLE LINEAR FIT WITH
TRANSFORMATIONS,
01, 741107**

Short Title: **MULFIT**

Narrative Description: This basic program provides a statistical analysis for up to 61 observations on up to 6 variables. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881033

Software Title: **RANDOM NORMAL DEVIATES (MEAN 0,
VARIANCE 1), 01, 741217**

Short Title: **NORDEV**

Narrative Description: This basic program generates random normal deviates with a mean of zero and a variance of one. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881034

Software Title: **RUNGE-KUTTA-GILL FOR
N EQUATIONS,
01, 741122**

Short Title: **NRKG**

Narrative Description: Runge-kutta-gill solution for n differential equations. This is a FORTRAN function. A users guide is available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881035

Software Title: ONEWAY ANALYSIS OF VARIANCE,
01, 741213

Short Title: ONEWAY

Narrative Description: This basic program performs a one way analysis of variance with equal sample sizes. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881037

Software Title: EVALUATE ORTHOGONAL
POLYNOMIALS,
01, 741113

Short Title: ORTHP

Narrative Description: This FORTRAN function evaluates an orthogonal polynominal. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881038

Software Title: SIMULTANEOUS PLOTS
OF FUNCTIONS,
01, 731031

Short Title: PLOTTO

Narrative Description: Plots 1 to 6 functions of x simultaneously. All have the same upper and lower limits. Functions are designated a, b, c, d, e, and f and are plotted in that order of priority. Where plots overlap, lower priority functions are suppressed. Values outside selected bounds are ignored. User Instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881039

Software Title: MULTIPLY POLYNOMIALS, 01, 741113

Short Title: PMPY

Narrative Description: Performs multiplication of two polynominals. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881040

Software Title: **LEAST SQUARES
ORTHOGONAL POLY FIT,
01, 741107**

Short Title: POLFIT

Narrative Description: Fits least square polynomials to bivariate data, using an orthogonal polynomial method. Limits are 11th degree fit and 100 data points. User specifies the lowest degree poly to be fit, then polys are fit in ascending degree order. At each stage, the index of determination is displayed. The user may then go to the next higher degree of fit, have the fit stage summarized, or stop. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881042

Software Title: **NORMAL AND T DISTRIBUTION,
01, 741213**

Short Title: PROVAR

Narrative Description: Calculates statistics for normal and student t distributions. Given one or two-tailed probabilities, it produces corresponding limits. Given a variate or set of limits, it will produce associated probabilities. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881043

Software Title: **RANDOM NUMBER UNIFORM
DISTRIBUTION, 01, 741212**

Short Title: RANDX

Narrative Description: Generates a random number from a uniform distribution ranging from zero to one. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881044

Software Title: **RANGED RANDOM NUMBER
GENERATOR,
01, 741213**

Short Title: RANUM

Narrative Description: Generates up to 600 random numbers within a specified range. They are displayed in ascending order. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881045

Software Title: **RANDOM SET GENERATOR, 01, 741213**

Short Title: RASEO

Narrative Description: Generates 1 to 260 sets of 1 to 4 random numbers each. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881046

Software Title: **RUNGE-KUTTA FIRST ORDER,**
01, 741118

Short Title: RKPB

Narrative Description: Integrates systems of first-order ordinary differential equations by the fourth-order runge-kutta method. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881047

Software Title: **DETERMINATION OF SAMPLE SIZE,**
01, 741213

Short Title: SAMSI

Narrative Description: Provides best estimates of sample sizes required to obtain specified confidence intervals, based on the results previously obtained from examining sample items. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881048

Software Title: **FUNCTION PLOT 9, 01, 741031**

Short Title: SCHEME

Narrative Description: Plots 1 to 9 curves on a single coordinate axis. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881049

Software Title: **CHI SQUARE OF SEVERAL PROPORTIONS, 01, 741213**

Short Title: SEVPRO

Narrative Description: Applies a chi-square test to several sample proportions. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
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Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881050

Software Title: **SIMULTANEOUS LINEAR EQUATIONS, 01, 741010**

Short Title: SIMEQN

Narrative Description: This program solves sets of simultaneous equations where the number of distinct variables equals the number of equations. (note where two eq. are the same and where an eq. is a real multiple of another, no unique solution exists. Note also where two equations differ in only the constants, no solution is possible.) User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881051

Software Title: **SIMULTANEOUS LINEAR SYSTEMS, 01, 741010**

Short Title: SIMEX1

Narrative Description: Solves a system of n simultaneous equations (linear) in n unknowns. Maximum for n is 38. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881052

Software Title: **SIMPLE LINEAR REGRESSION, 01, 741107**

Short Title: SIMFI

Narrative Description: Fits a SIMPLE LINEAR REGRESSION line to two variables. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
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3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881053

Software Title: **SIMPSONS RULE INTEGRATION,
01, 741010**

Short Title: SMPSON

Narrative Description: Numerical integration via Simpsons rule. Output of area, moment, and center of gravity about x and y axis. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
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 USDA Forest Service
 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881054

Software Title: **SPHERICAL TRIANGLES, 01, 741114**

Short Title: SPHERE

Narrative Description: Solves SPHERICAL TRIANGLES whose apex is at the north pole and whose other vertices are defined by their respective latitudes and longitudes. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
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 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881055

Software Title: **STATISTICAL MEASURES, 01, 741213**

Short Title: STATAN

Narrative Description: Computes 34 different measures for an array for a set of weighted or unweighted variables. It also gives a 10-class frequency distribution summary. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Lyle L. Boehler
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 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881056

Software Title: **STATISTICS OF A
FREQUENCY DISTRIBUTION,
01, 741213**

Short Title: STATFR

Narrative Description: This program computes 15 statistical measures describing the salient properties of a frequency distribution. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
 Lyle L. Boehler
 USDA Forest Service
 3825 East Mulberry Street
 Fort Collins, CO 80524
 Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881058

Software Title: **STATISTICS FOR UNWEIGHTED DATA,
01, 741213**

Short Title: STATNW

Narrative Description: This program computes 31 statistical measures of a string of unweighted numbers. The formulas were taken from the National Bureau of Standards Handbook 101. For weighted strings of numbers use program titled NBS statistics, prog. no. 98881060. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881059

Software Title: **STATISTICS FOR LINEAR REGRESSION,
01, 741107**

Short Title: STATSR

Narrative Description: Describes the primary properties of a least-squares linear regression. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881060

Software Title: **NBS STATISTICS, 01, 741213**

Short Title: STATWE

Narrative Description: Computes the 36 statistics given in National Bureau of Standards Handbook 101. Observations may be weighted or non-weighted. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881061

Software Title: **SINGLE VARIABLE STATISTICS,
01, 741213**

Short Title: STAT01

Narrative Description: Computes mean, variance, standard deviation, and standard error for a data set. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881062

Software Title: **STATISTICS FOR TWO VARIABLES,
01, 741213**

Short Title: STAT02

Narrative Description: This program computes the mean, variances, and t-ratio for two groups of data. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881063

Software Title: **2X2 CHI SQUARE, 01, 741213**

Short Title: STAT04

Narrative Description: Provides chi-square statistic for 2 x 2 tables. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881064

Software Title: **SIGN TEST, 01, 741213**

Short Title: STAT06

Narrative Description: Calculates SIGN TEST confidence interval using fractional counts. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881065

Software Title: **WILCOXON SIGNED RANK, 01, 741213**

Short Title: STAT07

Narrative Description: Calculates confidence limits using the WILCOXON SIGNED RANK sum test with fractional counts. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881066

Software Title: **SIMPLE LINEAR REGRESSION,**
01, 741107

Short Title: STAT10

Narrative Description: Performs linear regression of y or x. This basic program computes the slope and y-intercept for a SIMPLE LINEAR REGRESSION with one (1) independent variable. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881067

Software Title: **LINEAR REGRESSION OF**
GROUP OBSERVATIONS,
01, 741107

Short Title: STAT9A

Narrative Description: Performs linear regression of a multi-valued function. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881068

Software Title: **ONE-WAY ANOVA, 01, 741213**

Short Title: STAT13

Narrative Description: Produces the analysis of variance table and the f-ratio to test the significance of the difference between treatment means for a one-way, completely randomized experiment. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881069

Software Title: **COMPLETE BLOCK ANOVA, 01, 741213**

Short Title: STAT14

Narrative Description: Analysis of variance and f-ratios for treatments and blocks of a randomized complete block design. Maximum of 10 treatments and 10 blocks. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881070

Software Title: ANALYSIS OF
VARIANCE-GRAECOLATIN,
01, 741213

Short Title: STAT 16

Narrative Description: Analysis of variance and f-ratio for
a simple graeco-latin square design. Allows from 1 to 10
treatments. User instructions in FSH 6609.53 Interactive Appli-
cations Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881071

Software Title: BALANCED INCOMPLETE
BLOCK ANOVA,
01, 741213

Short Title: STAT 17

Narrative Description: Analysis of variance for a balanced
incomplete block design. Sums of squares is adjusted for
incompleteness. User instructions in FSH 6609.53 Interactive
Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881073

Software Title: LINEAR REGRESSION
EFROYMSON ALGORITHM,
01, 741107

Short Title: STAT20

Narrative Description: Performs multiple linear regressions
according to Efroymsons algorithm. User instructions in FSH
6609.53 interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881074

Software Title: MULTIPLE LINEAR REGRESSION,
01, 741212

Short Title: STAT21

Narrative Description: Performs multiple linear regressions
on a set. Optional output of residuals and variance-covariance
matrix. User Instructions in FSH 6609.53 interactive Applica-
tions Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881075

Software Title: **GENERALIZED ANALYSIS OF VARIANCE,** 01, 741112

Short Title: STAT22

Narrative Description: Partitions sums of squares for many types of complete block designs. Sources of variation may be either vested or crossed, as long as equal numbers exist in the sub classes. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881076

Software Title: **STATISTICAL INTERPRETIVE LANGUAGE,** 01, 741204

Short Title: STIL

Narrative Description: This is an interpretive language system which allows the user to quickly and easily write programs that solve a moderate range of statistical and probability problems. Among the commands are: mean, variance, standard deviation, correlation, regression, distribution, histogram, skewness, kurtosis, addition of arrays, subtraction of arrays, multiplication of arrays and division of arrays, etc. A users guide is available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881077

Software Title: **TESTS ON UNKNOWN DISTRIBUTIONS,** 01, 741212

Short Title: TESTUD

Narrative Description: Tests an unknown population mean using sample statistics. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881078

Software Title: **TRIANGLE SOLVER, 01, 741114**

Short Title: TRIANG

Narrative Description: Solves any triangle when given one side and any two other parts. Output includes triangle area and radii of inscribed and circumscribed circles. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881079

Software Title: **TWO FUNCTION PLOT, 01, 741107**

Short Title: TWOPLO

Narrative Description: Simultaneously plots two functions of a single variable. The functions may be any expression in the basic language. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881080

Software Title: **RANDOM NOS FOR FIXED MEAN, 01, 741212**

Short Title: XNORM

Narrative Description: Generates a random number from a normal distribution having mean zero and standard deviation one. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881081

Software Title: **RANDOM NOS FOR VARIABLE MEAN, 01, 741212**

Short Title: XNOR1

Narrative Description: Generates a random number from a normal distribution with user-supplied mean and standard deviation. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881082

Software Title: **ROTATED FUNCTION PLOT, 01, 741107**

Short Title: XYPLOT

Narrative Description: Plots a single-valued function in x, with x on the vertical coordinate axis. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881083

Software Title: **FUNCTIONAL ZEROES, 01, 741203**

Short Title: ZEROK

Narrative Description: Locates the relative maxima and minima and roots and zeroes of any function of a single variable. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881085

Software Title: **DISPLAY DATA FILES, 01, 750214**

Short Title: R5*FS.DISPLAY

Narrative Description: Reads any formatted SDF file and produces an output of the data items in any format desired by the user. Page headings and vertical data item headings are printed on output. The desired formats are prepared and entered by the user. Maximum input record length is 528 characters, maximum output width is 528 characters up to 4 pages wide. User guide available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881086

Software Title: **FACILITY STATUS PROGRAM, 01, 750214**

Short Title: FAC*STAT.X

Narrative Description: This program decodes the octal numbers accompanying a "fac. warning" or "fac. error" message, generated by the FCCC system and prints the explanation of the error as it appears in the UNIVAC system manual. User guide available.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 8 556 4287

System or Program I.D. Number
98881088

Software Title: **POLYNOMIAL REGRESSION ANALYSIS, 01, 750214**

Short Title: POLY

Narrative Description: Program calculates first, second and third degree regression equations in arithmetic and natural logarithms of y and x. The program has provisions for giving different significance to variables based upon frequency and/or inverse of variance. Prints scatter diagrams with automatic or user-supplied scaling. User guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo - Tom Smithberger
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 6274

System or Program I.D. Number
98881089

Software Title: **BINARY SORT VERSION 1 + 2,**
01, 750214

Short Title: US˙FS.SORT AND US˙FS.SORTF

Narrative Description: Sorts and merges data files. Also has general purpose subroutines accessible from FORTRAN programs for sorting and merging files and internal arrays. User guide.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881090

Software Title: **PLAN AND PROCESS**
MULTISTAGE SAMPLE,
01, 750214

Short Title: MUST

Narrative Description: Processes equal probability multistage samples and computes optimum sampling fraction at the various stages of sampling. Program designed to handle 3 stages. Reference: Pacific Northwest Forest & Range Experiment Station Technical Report PNW-11

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Hart
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 8 415 556 8489

System or Program I.D. Number
98881091

Software Title: **LARGE PRINCIPLE**
COMPONENT REGRESSION,
01, 750214

Short Title: WALLY1

Narrative Description: A large capacity regression program which can handle up to 120 transformed variables. Up to 40 dependent variables are allowed. The contribution of different variable combinations to the calculated variance are printed. These values were calculated using the Varimax rotated factor weight matrix procedure. User guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Hart
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 8489

System or Program I.D. Number
98881092

Software Title: **BALANCE ANALYSIS OF VARIANCE,**
01, 750214

Short Title: BALANOVA

Narrative Description: Analysis of variance for all balanced crossed and/or nested designs, excluding latin square, change-over and incomplete block designs. Up to 26 variable factors are allowed and the total number of treatment combinations is limited by computer core capacity. Relevant subclass means are listed with the analysis of variance table. User guide available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Hart
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 8489

System or Program I.D. Number
98881093

Software Title: **FORTRAN SORT INTERFACE,
01, 731201**

Short Title: SRT8

Narrative Description: Provides an interface between FOR-TRAN programs and the UNIVAC 1105/1108, Exec 8 sort/merge package.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Mike Efird
USDA Forest Service
1720 Peachtree Rd., NW
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
98881095

Software Title: **MESSAGE SERVICE, 01, 750606**

Short Title: MSG

Narrative Description: This program utilizes computer terminals to provide a quick method of sending messages between the regional offices and the national forests.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Barbara Nissen
USDA Forest Service
633 W. Wisconsin Avenue
Milwaukee, Wis 53203
Telephone Number: FTS 8 362 3687

System or Program I.D. Number
98881097

Software Title: **CONVERT, 01, 700730**

Short Title: CONV

Narrative Description: This program converts IBM system/360 extended binary coded decimal (EBCDIC) card records to CDC 3100 binary coded decimal card records. CONVRT reads cards, punches converted cards, and lists the converted cards. cards.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
Mark Clarke
USDA Forest Service   gion 4
Federal Building, 324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6838

System or Program I.D. Number
98881098

Software Title: **COPY ROUTINE GENERAL, 01, 711027**

Short Title: EFFI

Narrative Description: Program copies data from tape or disk to tape, disk or printer. Input files must be prepared by COBAL or FORTRAN programs. EFFIGY can skip files and/or records. Several input files and/or individual records can be merged. Program can handle records up to 15,000 words (60,000 characters) long. EFFIGY was particularly written to allow utility processing of files with records of over 5,000 characters in length and to allow utility processing of disk files on CDC 3100 computer.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
E Mark Clarke
USDA Forest Service
Federal Building, 324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6838

System or Program I.D. Number
98881102

Software Title: **STATISTICAL PROGRAMS, 01, 740301**

Short Title: STAT-PACK

Narrative Description: A group of STATISTICAL PRO-GRAMS including least squares regression, analysis of variance (6), polynominal regression, simultaneous equation solver, polynominal regression chi general statistics, transformations, student's t test, Bartlett's test, chi square test for goodness of fit, test of hypothesis-means, bioassay, etc.

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
V E Findell
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6841

System or Program I.D. Number
98881103

Software Title: **MULTIPLE REGRESSION, 01, 730101**

Short Title: MUREG

Narrative Description: Program performs the standard statistical analysis of MULTIPLE REGRESSION for any number of observations and up to 140 variables. Input can be raw data or correlation matrix. Output includes totals and means, corrected and uncorrected sums of squares, std errors, correlation matrix, standardized coefficients, regression coefficients and their standard errors, analysis of variance table for fitting regression, and the inverse of the matrix of corrected sums of squares and cross products of the independent variables. Program will handle almost any transformation. Can be used to fit the independent variables one at a time in the order in which they account for the reduction in sums of squares (step-wise).

Mode Software Developed for: Batch

Computer Manufacturer and Model: CDC 3100

Technical Information Contact:
V E Findell
USDA Forest Service
324-25th Street
Ogden, Utah 84401
Telephone Number: FTS 8 586 6841

System or Program I.D. Number
98881104

Software Title: **HISTOGRAM PLOTTING, 01, 751030**

Short Title: HISTOGRAM

Narrative Description: This program produces a HISTO-GRAM plot of the frequency on the y-axis and integer values on the x-axis using individual or grouped values and producing a bar graph. User may optionally designate dimensions, intervals and sizing of graph. Real values may be processed using the optional scaling factor. Input data may be described by a FORTRAN type format or may be free formatted. Program will self-document if requested. Defaults permit an easy to run program. Program uses a modified FORTRAN name list to capture options. Self-documenting.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Hart
USDA Forest Service
630 Sansome Street, San Francisco, CA 94111
Telephone Number: FTS 556-8489

System or Program I.D. Number
98881105

Software Title: **REFORMAT DATA FILES, 01, 751029**

Short Title: REFORM

Narrative Description: Reformats data files up to 132 characters in length, with ability to re-order, duplicate fields, and insert constants by use of control cards containing FORTRAN type formats. Program is useful for aligning fields within data files to be used for other programs having a fixed input format. Program will self-document during execution if prompted.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Dennis Hart
USDA Forest Service
630 Sansome Street, San Francisco, CA 94111
Telephone Number: FTS 556-8489

System or Program I.D. Number
98881106

Software Title: **FREE FORMAT READING ROUTINE,
01, 751029**

Short Title: READIN

Narrative Description: This subroutine reads 80-character records in free-format. Each data field in a record must be separated by at least one space. Input may consist of alpha data strings or of the following FORTRAN formatted numeric data: integers fixed point floating point (e-formatted). Integers greater than the maximun integer allowed in the computer will be treated as alpha data. The user may either supply the logical unit number where the data is stored or he may pass the data from his program to the subroutine. User guide available.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Charles Stadelman
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 6274

System or Program I.D. Number
98881107

Software Title: **EASY, 01, 750418**

Short Title: EASY

Narrative Description: This program allows for the reformatting of data using virtually any format desired without requiring the data to be entered in specific columns. Data is entered from demand terminals either keyed in directly or transmitted from a cassette tape.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Martin Wefald
USDA Forest Service
630 Sansome Street
San Francisco, CA 94111
Telephone Number: FTS 556 1785

System or Program I.D. Number
98881108

Software Title: **MILEAGE REPORT, 01, 760130**

Short Title: GRECO

Narrative Description: Prints monthly, quarterly and yearly summary of vehicle use. Calculates a target mileage for a month using a vehicle's base mileage and its actual mileage for the previous months. Gives percentages for over and under use of a vehicle by vehicle, section and total all vehicles. An operators manual is available to users.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Alice Reeves
USDA Forest Service
P.O. Box 1390
Klamath Falls, Oregon 97601
Telephone Number: FTS 8 424 7338

System or Program I.D. Number
98881109

Software Title: **REGRES, 760908**

Short Title: REGRES

Narrative Description: REGRES performs correlation and stepwise multiple regression analysis. A transformation routine allows the user to make a variety of transformations to the data prior to doing the statistical portion of the analysis.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gary Goodwin
USDA Forest Service
P.O. Box 310
Coeur D'alene, Idaho 83814
Telephone Number: FTS 8 442 9297

System or Program I.D. Number
98881110

Software Title: **STEPWISE MULTIPLE REGRESSION, 760908**

Short Title: STEPWISE

Narrative Description: This program computes a STEPWISE MULTIPLE REGRESSION with pooled covariance option.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Demmy
USDA Forest Service
P.O. Box 147 290 So. Main
Kalispell, Mt. 59901
Telephone Number: FTS 8 585 3104

System or Program I.D. Number

Short Title: FS˙R1.DIGMAP

Narrative Description: FS˙R1.DIGMAP is a program that converts a digitized map file into the format necessary for input to FS*R1.MAPIT3 (reference program no. 27001004).

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Doris L. Matz
USDA Forest Service
Sandpoint, Idaho
Telephone Number: 208-263-5111

System or Program I.D. Number
98881113

Software Title: **FORMATTED FILE, 780329**

Short Title: CSSG˙R1LIB.FORMAT

Narrative Description: Creates a FORMATTED FILE from an unformatted data file. The program will handle up to 9 different formats and up to 18 fields each. A control file sets up the format specs.

Mode Software Development for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Joe Knudsen
USDA Forest Service
Federal Building
Missoula, Mont 59801
Telephone Number: FTS 8 585 3823

System or Program I.D. Number
98881114

Software Title: **CROSS-CLASSIFICATION WITH RECODING, 760908**

Short Title: CSSG˙R1LIB.CROSST

Narrative Description: This program has been prepared in order that cross-classification tables may be rapidly and accurately obtained for selected pairs of variables. Frequency matricies (up to size 20x20) are tabulated and printed in the form of cross-classifications.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Jim Denny
USDA Forest Service
P.O. Box 147 290 No. Main
Kalispell, Montana 59901
Telephone Number: 755-5401

System or Program I.D. Number
98881115

Software Title: **STATISTICAL PROGRAMS
REDUCTION+ANALYSIS
OF WATER QUALITY DATA**

Short Title: BASICSTAT

Narrative Description: Statistical programs commonly used in reduction and analysis of water quality data. Programs were adapted from RAMUS system and include: mean, variance, std. deviation, comparison of means for paired and unpaired data, curve fits, multiple linear regressions.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881116

Software Title: **CLUSTER ANALYSIS, 760301**

Short Title: CLUSTER

Narrative Description: Assist in analysis of large amounts of data by forming groupings from a subject variable matrix (100 subjects and 100 variables).

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 323 1417

System or Program I.D. Number
98881117

Software Title: **DETERMING NUMBER OF
SAMPLES TO DESCRIBE A MEAN**

Short Title: SAMPLES

Narrative Description: User's guide describing how to determine the number of SAMPLES needed to describe a mean using outputs from program frequencies from 2nd edition of SPSS.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881118

Software Title: **PEARSON TYPE III
CUMULATIVE PROBABILITY DISTRIBUTION**

Short Title: PEARSON

Narrative Description: Defines a PEARSON type 3 cumulative probability distribution from the base-10 logarithms of the sample.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881124

Software Title: **SUMMARIZE WEIR,**
POND,
OR CHANNEL MEASUREMENTS,
750601

Short Title: DEBRIS

Narrative Description: SUMMARIZE WEIR, pond, or channel measurements to obtain volume within the flows.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881125

Software Title: **REGRESSION PROGRAM FOR**
STAGE DISCHARGE, 720601

Short Title: RATER

Narrative Description: Regression program for stage discharge model.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881126

Software Title: **RADIATION TABLES, 701201**

Short Title: RAD

Narrative Description: Computes extra-terrestrial radiation by days & months for each latitude, slope, and aspect desired.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881127

Software Title: **PREDICT SOIL LOSSES, 701101**

Short Title: ONEROS3

Narrative Description: Estimate and PREDICT SOIL LOSSES due to management activities. Model accounts for on site, gully, and road erosion.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gordon Warrington
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881128

Software Title: **WATER BALANCE SIMULATION MODEL,**
700401

Short Title: BURP2

Narrative Description: WATER BALANCE SIMULATION MODEL to assist in obtaining first approximation assessments of the hydrologic impact of cutting in forested areas.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
David Ryn
USDA Forest Service
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881129

Software Title: **SHEET EROSION CALCULATION,**
760601

Short Title: USLE

Narrative Description: Calculates sheet erosion using the universal soil loss equation.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Gordon Warrington
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881130

Software Title: **STREAMFLOW-RECORDER
DATA REDUCTION,**
681201

Short Title: HYDRA

Narrative Description: Summarizing step in the preparation of runoff information from punch-tape water stage recorders.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Eric Siverts
USDA Forest Service
3825 E. Mulberry
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1417

System or Program I.D. Number
98881132

Software Title: **TUTORIAL PROGRAMS FOR BASIC,**
761028

Short Title: TUTOR

Narrative Description: Summarizing step in the preparation of runoff information from punch-tape water stage recorders. This series of basic programs are self-instruction programs on the basic language. All data is entered in response to questions asked by the programs. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 E. Mulberry St.
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881133

Software Title: CONFERENCE SYSTEM
UTILIZING TERMINALS,
770923

Short Title: OEP

Narrative Description: Provides three methods of group communication utilizing computer terminals as the vehicle for conducting a group discussion among geographically dispersed individuals. Completely normal language is used. System is simple to use and is relatively inexpensive.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Harry A. South
USDA Forest Service
P.O. Box 2417
Washington, DC 20013
Telephone Number: FTS 235-1473

System or Program I.D. Number
98881134

Software Title: RE-WORK, 01, 770930

Short Title: RE-WORK

Narrative Description: This program serves as a time-saving aid to a COBOL programmer. Using a COBOL source deck as input, it is capable of such things as resequencing the source deck, assigning new identification, changing specified characters to different ones, expanding pre-defined abbreviated words and phrases, and producing among other types of output the new punched source deck. RE-WORK may prove especially useful during times when hardware or compiler conversions occur. A user's guide is available.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Lyle L. Boehler
USDA Forest Service
3825 East Mulberry Street
Fort Collins, CO 80524
Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98881135

Software Title: RAND, 761029

Short Title: RAND

Narrative Description: A FORTRAN function to generate random numbers. May also be executed as the independent program - RANDON.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
M.O. Efird
USDA Forest Service
1720 Peachtree Rd., N.W. (Rm-215)
Atlanta, GA 30309
Telephone Number: FTS 8 257 4140

System or Program I.D. Number
98881136

Software Title: SIMPLE CORRELATION

Short Title: SIMPLE CORRELATION

Narrative Description: This program computes simple correlations between two characters and their basic statistics.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Number: FTS 490 4211   Comm 601 686 7218

System or Program I.D. Number
98881137

Software Title: **ANALYSIS OF VARIANCE - RANDOMIZED BLOCK**

Short Title: ANOV-RCB

Narrative Description: This program provides the analysis of variance for a study arranged in a randomized complete block design that has a maximum of 100 treatments with a maximum of 6 replications (blocks).

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Number: FTS 490 4211   Comm 601 686 7218

System or Program I.D. Number
98881138

Software Title: **FRIEDMAN'S TEST-ANOV BY RANKS**

Short Title: FRIEDMAN'S TEST

Narrative Description: This program computes FRIEDMAN'S TEST statistics (or s') to test the null hypothesis of TRT1 = TRT2 = . . . = TRTK; against the alternative that the treatments are not all equal. This is a non-parametric statistical procedure without the prerequisite of normally distributed data.
data.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Number: FTS 490 4211   Comm 601 686 7218

System or Program I.D. Number
98881139

Software Title: **SPEARMAN'S COEFFICIENT OF RANK CORRELATION**

Short Title: SPEARMAN'S TEST

Narrative Description: This program is designed to compute SPEARMAN'S COEFFICIENT OF RANK CORRELATION and the test criterion "t" to determine statistical differences in treatment rankings.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Numbers: FTS 490-4211 (Jackson,
MS Operator) Comm 601 686-7218

System or Program I.D. Number
98881140

Software Title: **COMPARISON OF SAMPLE MEANS WITH PAIRED OBSERVATIONS**

Short Title: PAIRED-T

Narrative Description: Computes student's "t" for comparison of treatment means with paired observations.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Numbers: FTS 490-4211 (Jackson,
MS Operator) Comm 601 686-7218

System or Program I.D. Number
98881141

Software Title: **BARTLETT'S TEST FOR HOMOGENEITY OF VARIANCES**

Short Title: BARTLETT'S TEST

Narrative Description: This program is used to test a set of sample variances to determine whether or not they are homogeneous.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Numbers: FTS 490-4211 (Jackson, MS Operator) Comm 601 686-7218

System or Program I.D. Number
98881142

Software Title: **YATE'S APPROXIMATION FOR MISSING PLOTS IN THE RCB**

Short Title: MISSING PLOT - (RCB)

Narrative Description: This program computes Yate's approximation for missing plots in an RCB design for either single or multiple missing plots.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Numbers: FTS 490-4211 (Jackson, MS Operator) Comm 601 686-7218

System or Program I.D. Number
98881149

Software Title: **TIDY ROUTINE, 01, 760512**

Short Title: TIDY

Narrative Description: This program activates the FCCC system FORTRAN TIDY ROUTINE with a set of default options. The only input required is a line stating the input and output element names.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881150

Software Title: **COVARIANCE ANALYSIS, 01, 760331**

Short Title: COVAR

Narrative Description: COVAR is a COVARIANCE ANALYSIS program which processes optional output from program poly (ref. prog. no. 98881088).

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden K. Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881151

Software Title: **RANDOM NUMBER GROUP GENERATION, 01, 761108**

Short Title: RANDXY

Narrative Description: This program generates sets of two dimensional random number groups, ie. random x and y coordinates, where x and y range on different bounds. Useful in random point generation on maps. The standard input is a line of whole numbers specifying minimum and maximum x axis, minimum and maximum y axis, total number of sets wanted, and initial seed value (optional).

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden K. Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881152

Software Title: **ERROR MESSAGE LISTING, 01, 751021**

Short Title: ERR*MODE.X

Narrative Description: Lists error messages, given the error status codes returned by UNIVAC system routines.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881153

Software Title: **CONVERT 029-026 PUNCH CODES, 01, 751218**

Short Title: US*FS.029-026

Narrative Description: With no option, the program converts 029 punch code data into 026 punch code data. With an "r" option, the program converts 026 data into 029 data. With an "n" option, the program converts any user specified input characters into any user specified output characters.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881154

Software Title: **CURRENT TIME STATUS, 01, 750724**

Short Title: TIME*STATUS

Narrative Description: Computes the CURRENT TIME STATUS of any run (demand or batch) at FCCC. All the accounting information that is calculated at the end of a run is given. Includes options to get total amount of time used, set a user time initialization, calculate accumulated time, and change the time initialization.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881155

Software Title: **FORMAT FREE-FIXED DATA, 01, 761105**

Short Title: FORMAT

Narrative Description: This utility program accepts data in a free FORMAT structure and converts it into a fixed FORMAT structure. Up to 36 different formats may be used at one time.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881156

Software Title: **FILE DUMP, 01, 760512**

Short Title: DUMP

Narrative Description: This program dumps any sequential disk or tape file in either FLDATA or ASCII and/or octal in groups of 28 words (sectors). Program is best used in demand mode but could be used in batch.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881157

Software Title: **PROGRAM USE LOG, 01, 761026**

Short Title: IOLOG

Narrative Description: Adds data to a program log file. Periodically a summary of users of your programs incorporating this routine is printed and routed for your inspection.

Mode Software Developed for: Batch

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
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630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
98881158

Software Title: **FILE UPDATE PROGRAM**

Short Title:

Narrative Description: The program will update an 80-character card image file specified by the user, in batch or demand mode. It will operate on a file in sequential order, allowing more than one update per record. The program is very efficient and may reduce costs over the data processor or text editor. The update program uses instructions to change, delete, insert, and insert a field.

Mode Software Developed for: Batch and Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Cliff Reichard or Bob Swarthout
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Numbers: FTS 556 7441,
556 3056

System or Program I.D. Number
98881159

Software Title: **FILE SAVE PROGRAM, 01, 750320**

Short Title: FILE*SAVE

Narrative Description: Saves a tape or disk file at FCCC. The program accepts input in a free format, conversational form, then prompts the user.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
Bohden Cmaylo
USDA Forest Service
630 Sansome St.
San Francisco, CA 94111
Telephone Number: FTS 556 4287

System or Program I.D. Number
9881161

Software Title: **NONLINEAR REGRESSION WITH A DICHOTOMOUS DEP. VARIABLE, 740501**

Short Title: RISK

Narrative Description: The algorithm fits the relationship between a dichotomous dependent variable and a number of independent variables. The specific functional form utilized is the logistic function. Complete documentation available in USDA Forest Service Research Paper Int-152. Application of this algorithm in development of a model of the probability of individual tree mortality reported in USDA Forest Service Research Paper Int-185.

Mode Software Developed for: Batch

Computer Manufacturer and Model: IBM 360/67 AMDAHL 470-U6

Technical Information Contact:
David A. Hamilton, Jr.
Int Forestry Sciences Laboratory
1221 S. Main St.
Moscow, Idaho 83843
Telephone Number: Comm 208-882-3557

System or Program I.D. Number
98881162

Software Title: **SCREENING PREDICTORS OF DICHOTOMOUS DEPENDENT VARIABLES, 750701**

Short Title: SCREEN

Narrative Description: The algorithm screens potential relationships between a set of independent variables and a dichotomous dependent variable. Complete documentation available in USDA Forest Service General Technical Report Int-22. Application of this algorithm in development of a model of the probability of individual tree mortiality reported in USDA Forest Service Research Paper Int-185.

Mode Software Developed for: Batch

Computer Manufacturer and Model: IBM 360/67 AMDAHL 470-U6

Technical Information Contact:
David A. Hamilton, Jr.
Int Forestry Sciences Laboratory
1221 S. Main St.
Moscow, Idaho 83843
Telephone Number: Comm 208 882 3557

System or Program I.D. Number
98881163

Software Title: **UNPAIRED T-TEST, EQUAL OR UNEQUAL OBSERVATIONS**

Short Title: UNPAIRED T

Narrative Description: This program is designed to test for statistical differences between sample means using the "t" statistic. This program may be used whether there are equal observations in the samples or not and whether the user can make the assumption of homogeneous variances or not.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: HPC 9830A

Technical Information Contact:
Robert B. Ferguson
USDA, Forest Service
P.O. Box 227
Stoneville, MS 38776
Telephone Numbers: FTS 490-4211(jackson, Ms Operator) Comm 601-686-7218

System or Program I.D. Number
98882000

Software Title: **LINEAR PROGRAMMING**

Short Title: LNPROG

Narrative Description: This program computes the optimum solutions for LINEAR PROGRAMMING problems. A linear objective function is maximized (or minimized) subject to a set of linear constraints. User instructions in FSH 6609.53 Interactive Application Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98882001

Software Title: **STATISTICS**

Short Title: STAT

Narrative Description: This program processes a series of data points and computes the mean, median, range, standard deviation, variance, skewness, kurtosis, and confidence limits of the data. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463

System or Program I.D. Number
98882002

Software Title: **STATISTICS 1A**

Short Title: STAT1A

Narrative Description: This program computes the means, standard error of means, mean difference, standard error of difference, and t-ratio for two groups of data (paired). Equal variance is assumed. User instructions in FSH 6609.53 Interactive Applications Handbk.

Mode Software Developed for: Interactive

Computer Manufacturer and Model: UNI 1100/42

Technical Information Contact:
  Lyle L. Boehler
  USDA Forest Service
  3825 East Mulberry Street
  Fort Collins, CO 80524
  Telephone Number: FTS 8 323 1463